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# ARMOR OF THE AFGHANISTAN WAR

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## Introduction

This book provides a unique pictorial look at one of the most secret wars of the past decade- the Soviet war in Afghanistan. For most of the time the Soviet Army fought in Afghanistan, the Soviet press provided very little coverage. It was only after unprecedented public concern inside the USSR over the war began bubbling up that media coverage of the Soviet side of the war began to regularly take place.

This book contains a remarkable series of photos obtained from three main sources. One of the authors, the Polish journalist Wojciech Luczak, was allowed to visit Afghanistan on several occasions during the war, which allowed him to take photographs first hand of both Soviet and Afghan Army units. From contacts built up amongst Soviet veterans of the war, Wojciech was also able to obtain a large number of official Soviet photos of the war, never before published in the Soviet Union or anywhere else. These photos were captioned by Wojciech and Steve Zaloga. The third source of photos for this book comes from sources connected with the UN monitoring of the Soviet withdrawal from Afghanistan and were taken by D.M. Mair. These photos have been captioned by Barry Beldam.

The focus of this book is the use of armored vehicles. Afghanistan was not a tank war, but this book is intended for modelers and military historians interested in contemporary tank warfare. Needless to say, the mujihadeen rebel forces made very little use of armored vehicles. But the Soviet Army, configured to fight a conventional war in central Europe, was based around armored vehicles. Soviet tactics centered around the use of armored vehicles even though such weapons were not entirely appropriate to the conditions of the war. It took the Soviet Army several years to shed its European orientation and to focus on the essentials of mountain warfare: light infantry tactics and air mobile operations. Nevertheless, armored operations remained a prominent part of Soviet and allied DRA Army (Democratic Republic of Afghanistan) tactics, especially in regards to keeping open the key routes of communication between the capital in Kabul and the distant outposts around the country. The armored vehicle fighting in Afghanistan was not the classic clash between two mechanized formations, but rather a series of daily encounters as the Soviets and DRA Army fought to keep the roads open, and their supply convoys moving freely. Periodically, large scale mechanized operations were staged by the Soviet forces, mainly to relieve the siege of embattled DRA Army garrisons on the Pakistani or Iranian frontier.

The Soviet forces in Afghanistan, the 40th Army, were known in the Soviet Press as the Limited Contingent of Forces-Afghanistan, or by its Russian acronym, the OKDvA. As the title implies, the Soviet commitment to Afghanistan was limited, both in a strategic and material sense. The equipment used in the Afghanistan war was not the latest high-tech marvels of the forward deployed forces in eastern Germany, but mostly older equipment more typical of backwaters like the Turkestan Military District from which many of the Soviet units were drawn. The main battle tank in Afghanistan was not the spanking

new T-80, or even the T-72. It was the venerable T-62 tank first manufactured in 1959. The Soviet General Staff saw no reason to waste expensive new tanks in Afghanistan when the old T-62 was perfectly adequate.

If the old T-62 proved adequate, the older armored infantry transporters- the BTR-60, BMP-1 and BMD-1, did not. The BTR-60 was old and mediocre. Particularly worrisome was its twin-engine configuration which was mechanically troublesome and prone to untimely breakdown. Nor was the fact that it was gasoline powered much appreciated by its troops. The BTR-60 was thinly armored, and when the rear engine compartment was penetrated, serious gasoline fires often ensued. The BTR-60 earned the grotesque sobriquet, *kolesniy grob*: the "wheeled coffin". It was eventually replaced by the BTR-70, with its less fire-prone diesel engines, and finally in 1987 by the BTR-80, with a single diesel engine, rather than two tandem engines. The other major drawback of the BTR-60, the limited elevation of the main gun, was a serious problem in Afghanistan where the opposing mujihadeen forces often attacked from high atop neighboring mountains. This led to the development of a new turret for the BTR series, first appearing on later production BTR-70s and then on the BTR-80. This gave better elevation to the main gun.

The more expensive and complicated BMP-1 infantry fighting vehicle was better armored and more reliable than the BTR-60. Its main shortcoming was its gun, the Grom 73mm low-pressure gun, which hadn't the elevation or high explosive fire power to prove effective against guerilla forces hiding behind rocks and crevasses. The new BMP under development, the BMP-2, followed western design practices and used a 30mm cannon instead. The lessons of Afghanistan led its designers to modify the design early in its production run to give it greater elevation. This made it the best armored vehicle for many missions in Afghanistan's rugged mountains.

The VDV airborne forces, which provided a disproportionate share of the combat troops due to their better training and morale, was not well equipped for Afghanistan. Their small BMD-1 airborne assault vehicles were too cramped for prolonged field operations. The BMD-1 also shared all of the BMP-1's armament shortcomings since it used the same turret. The VDV airborne force could not afford to develop a new vehicle on short notice, and so instead, was equipped with vehicles from the regular Army units- primarily BMP-2s and BTR-70s.

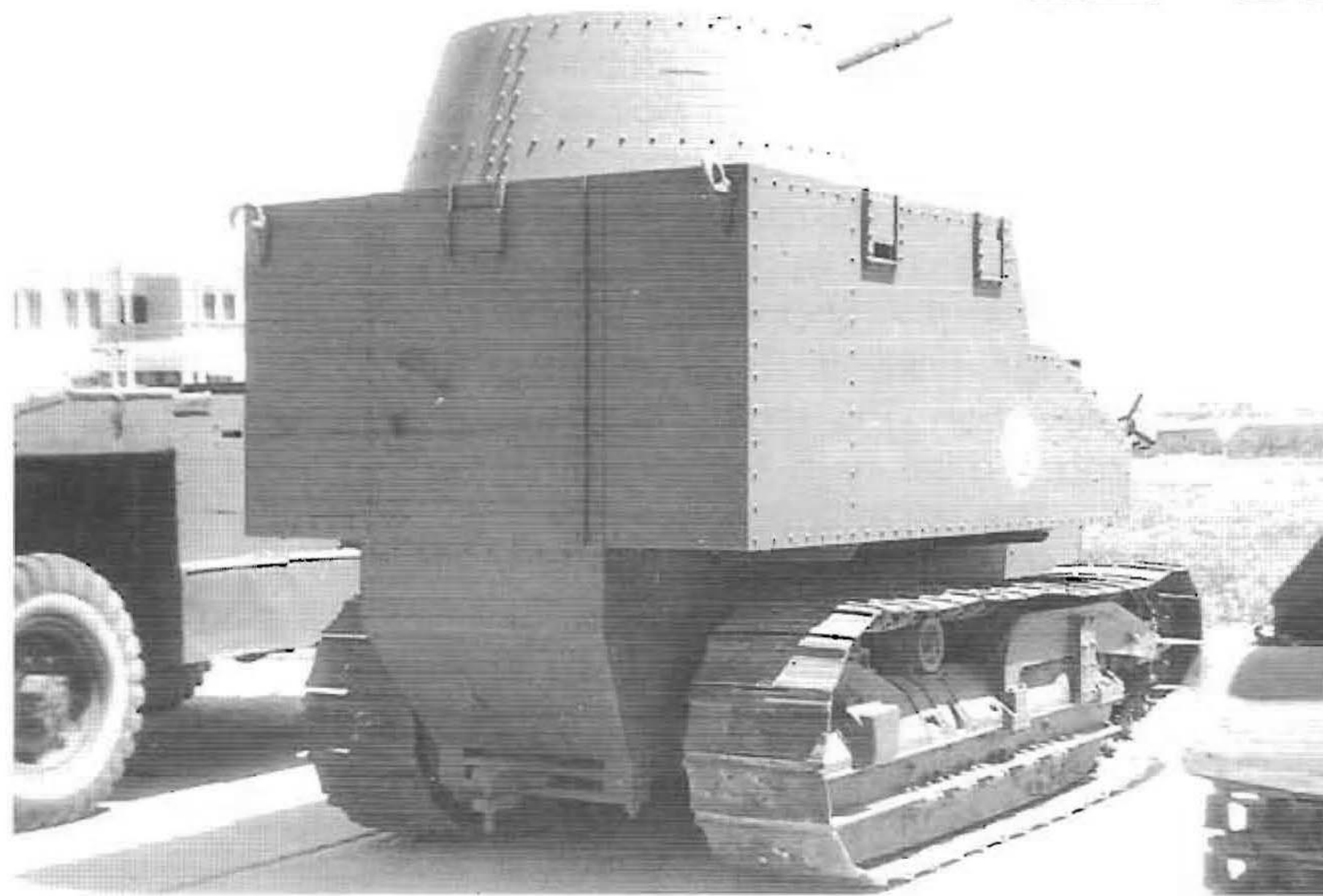
To round out the book, the authors have selected photos not only of armored vehicles, but troops and other equipment as well to help give a better feel for the war. This book in many ways serves as a counterpart to the earlier Concord Publications book on the Afghanistan War by David Isby which covered the war from the stand-point of the rebel mujihadeen forces. The complicated subject of the changes in Soviet infantry uniforms during the war is beyond the scope of this book, but we hope that the photos here will provide many unique examples of the evolution which took place during the fighting.



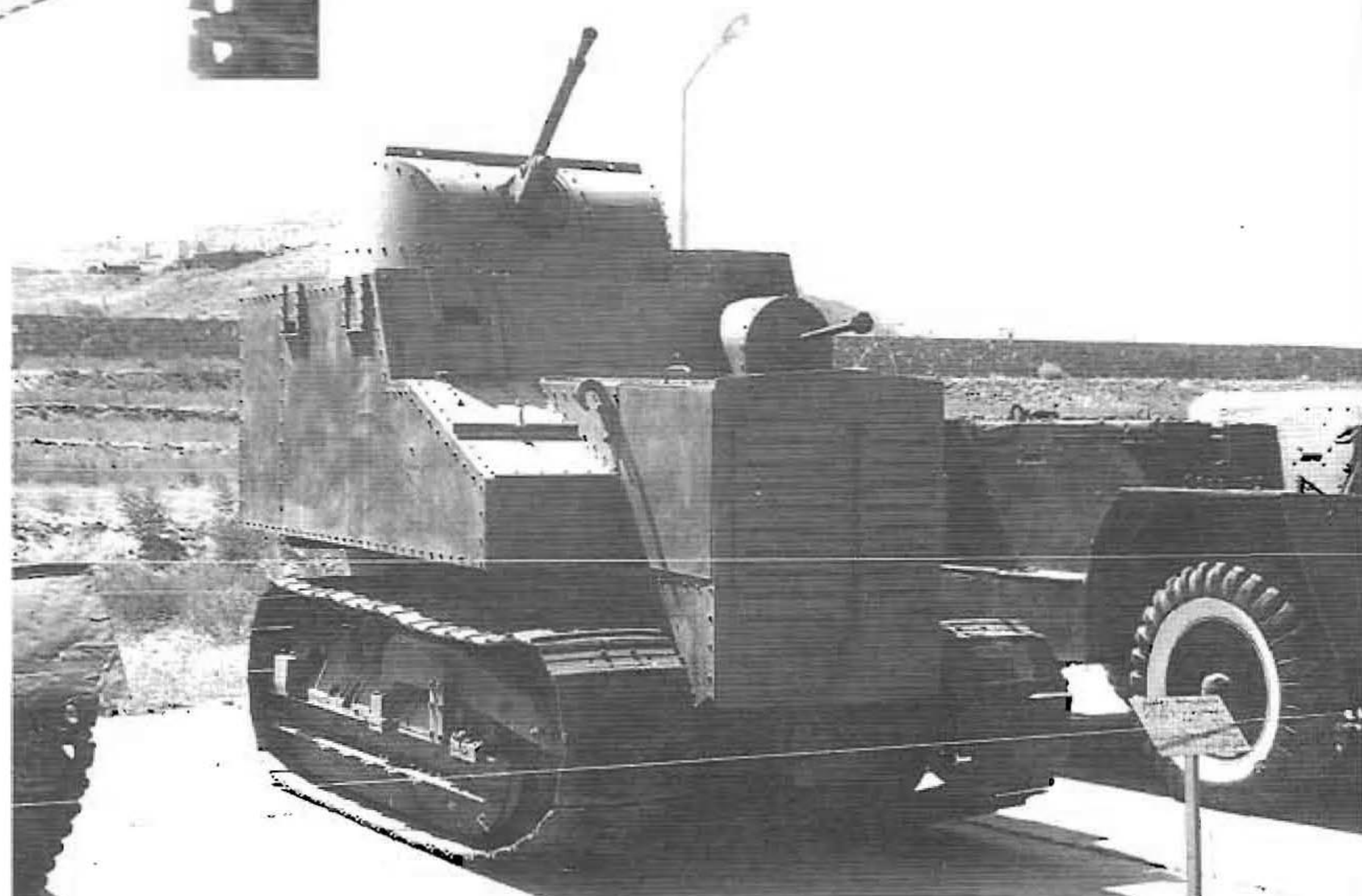


On the outskirts of Kabul is an Armor Museum associated with the Tank School. It contains a remarkable variety of vehicles including (left to right) a T-34-85, an Su-76M, a Disston Tractor Tank, a BTR-40, Universal Carrier and a CV.35 light tank.

Probably the rarest tank in the Afghani collection is this Disston Tractor Tank. The Disston tank was manufactured in 1934 in the United States on a commercial Caterpillar 30 chassis strictly for export. When first sold to Afghanistan, it was armored with a 37mm gun in the turret and a Colt machine gun in the hull. The Afghani Army used these old dinosaurs in to the 1960s as training vehicles. The 37mm turret gun was replaced by a Soviet 14.5mm KPVT and the hull machine gun with a 12.7mm DShK.



The Disston Tractor tank weighted 10 tons and was armored with steel plate a quarter inch thick, rising to .40 inch thick at points.



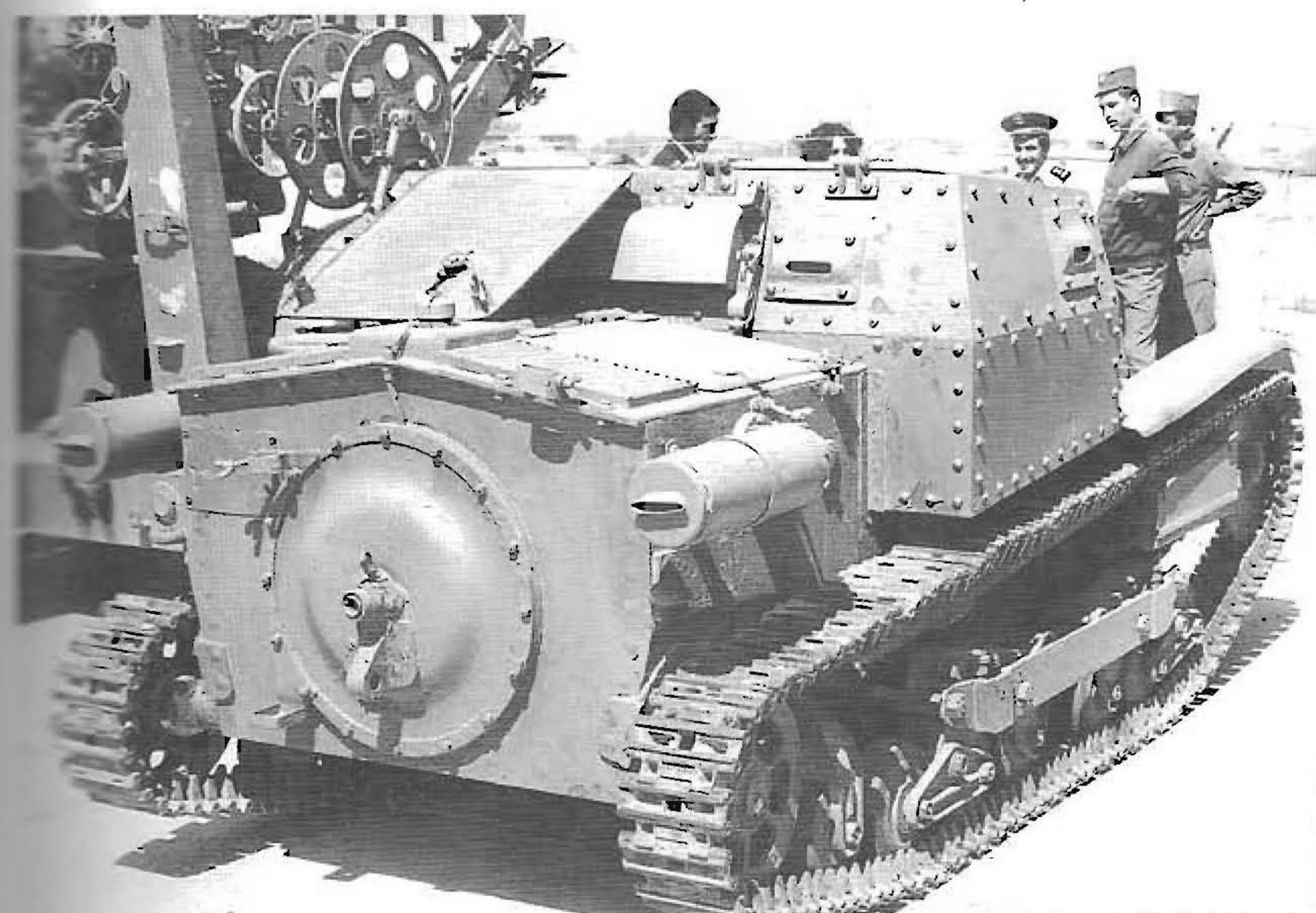
A right side view of the Disston Tractor Tank.



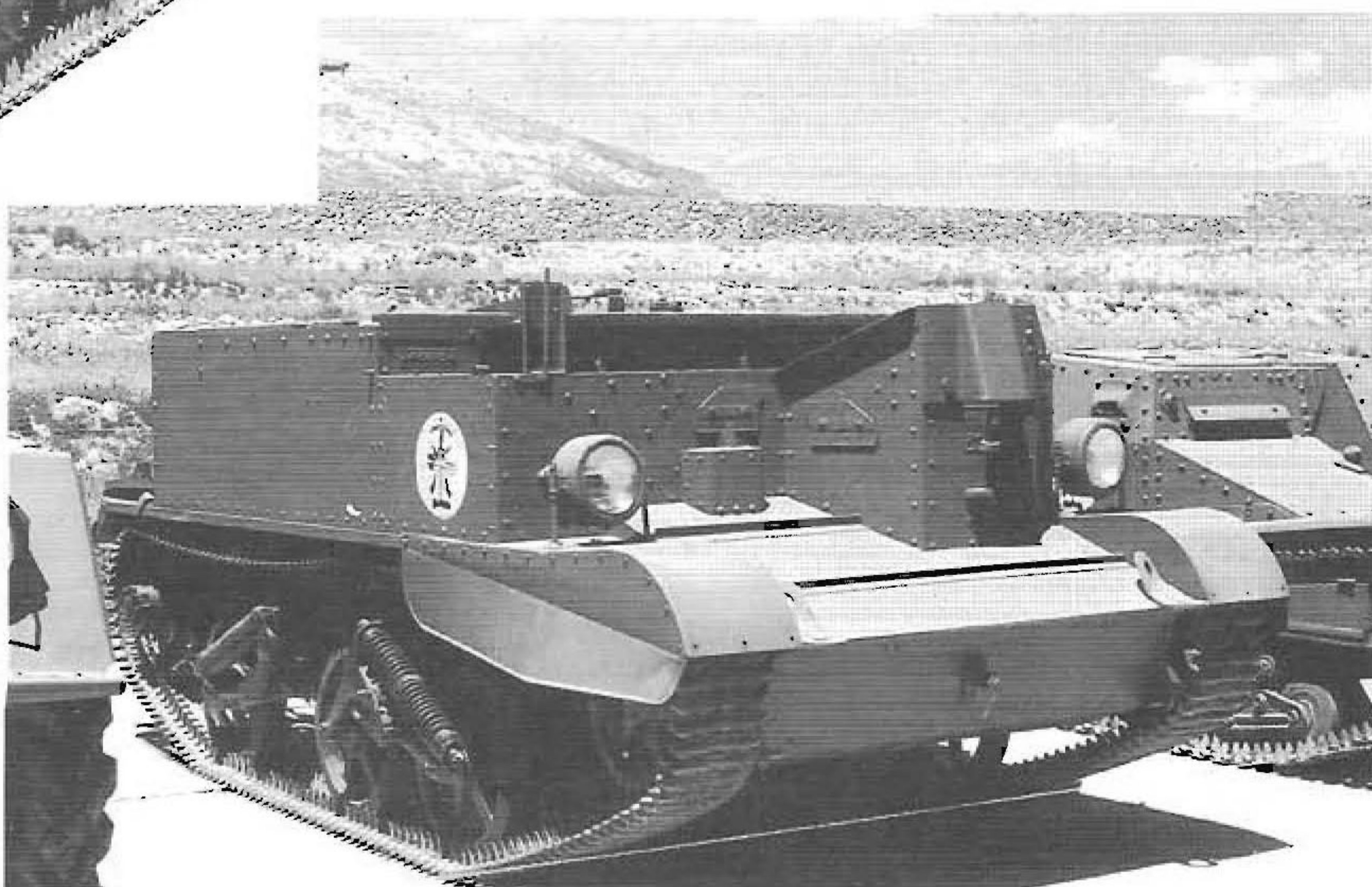


A small number of Ansaldo C.V.35 (II tipo) tankettes were sold to Afghanistan in the 1936-39 period. Quite surprisingly, they were still in service for training purposes up to the 1960s before they were retired to museums, or used as gate guards.

Another view of the Museum's C.V.35. It has been marked with the Afghani insignia typical of the mid-1980's. The C.V.35 was armed with two machine guns.



A rear view of the Afghani C.V.35. It is in surprisingly good shape considering its age.



Afghanistan received western military supplies in the post-war years, including this Universal Carrier.





One of the authors (Wojciech Luczak) at the Kabul Museum in front of its T-54A. In the background is a V-75 (SA-2 Guideline) missile.



Lena, Wojciech Luczak's interpreter, during one of his trips to Afghanistan during the war, was surprised to see this BMP-1 in the Youth Organization Park in Kabul in 1987. Earlier in the 1980's, she had been drafted into the city's Special Militia Force. In one action with the mujihadeen, her unit had been supported by this BMP-1, it was retired to the museum after it became worn out.



These VDV Air Assault paratroopers have just returned home to the Soviet Union in 1982. It was troops from this unit who were the first combat forces involved in the December 1979 actions in Kabul during the Soviet invasion.



Soviet motor rifle units began to be used on an increasing scale against the mujihadeen in 1982. This BMP-1 platoon was involved in actions near Jalalabad in Nangarhar province in 1982.



Another view of the BMP-1 platoon near Jalalabad. In the early days of the Soviet involvement, the equipment and uniforms of the Soviet troops were identical to those in Europe. It would take time before local modifications came into force.



Two squads from the BMP-1 platoon dismount from their vehicles and move forward. The troops and equipment look very little different from their counterparts in Germany or Russia. Things would change as the war dragged on.





A BMP-1 company during a mission near Jalalabad in 1982. Photos from this period are rare as Soviet press coverage of the war at this stage was very limited.

The diesel engine of the BMP-1 tends to be very smoky, as is the case of this BMP-1 exiting a river outside Jalalabad.



Another view of BMP-1s fording a river near Jalalabad in 1982. These exercises usually took place before operations in the nearby Kunar valley.

BMP-1s exiting the river near Jalalabad. These BMP-1s are probably part of the 66th Motor Rifle Brigade stationed in Jalalabad at the time.





A pair of BMP-1's, supported by a T-62M tank in the fighting near Bagram in 1982. There were many mujihadeen efforts to raid the big Soviet air base at Bagram.



An Afghan D-30 122mm howitzer battery providing covering fire for Afghan Army forces during fighting outside Shinand city in Farah province in 1982. The use of Soviet steel helmets by Afghan troops was not universal, the soft field cap being preferred.



An Afghan D-30 howitzer crew taking aim in the direct fire support role near Shinand in 1982.



An Afghan motor rifle company conducts a dismounted counterattack during fighting outside Jalalabad in 1982.



Although normally a motor rifle unit, this Afghan infantry unit is conducting its patrol on foot outside Jalalabad in 1982.



Besides the regular DRA Army (Democratic Republic of Afghanistan), the internal security force, the Sarandoy, also used armored vehicles like this BTR-60PB patrolling the streets of Mazari Shariff in northern Afghanistan. Sarandoy vehicles typically carried no markings.





Some DRA Army units were still equipped with older Soviet armored vehicles types, such as this BTR-152 captured by the mujihadeen. Field improvisations during the war were commonplace, such as the addition of this quadruple 12.7mm DShK mounting. Although intended originally for air defense, these quadruple machine gun mounts proved to be formidable anti-personnel weapons during convoy battles. (David Isby)



Older tanks, like the T-34-85 were mainly relegated to the Sarandoy internal security forces. But they were used on occasion by the regular DRA Army units, as is evident in this view of a vehicle captured by the mujihadeen. (David Isby)



A 122mm Model 1938 howitzer of the DRA Army firing on mujihadeen forces outside the Shinand city area in Farah province in 1982. This World War 2 howitzer was the standard artillery weapon of the DRA Army, though increasing numbers of the newer D-30 became available from Soviet sources as the war dragged on.



Some of the surviving Army T-34-85s ended up as gate guards, like this vehicle outside a DRA Army base in Kabul.



The Soviet OKDvA (Limited Contingent of Forces-Afghanistan) began using elite Spetsnaz units on an increasing scale as the war dragged on. The Spetsnaz were far more successful than the rank-and-file motor rifle troops, particularly for difficult scouting and raiding missions like this one jumping off a BTR-60PB in the Bagran area in 1982.



The uniforms and dress of the Spetsnaz in Afghanistan was not substantially different from that of the VDV air assault forces. This Spetsnaz recon patrol is wearing the standard Soviet KMLK coveralls.



Less celebrated than the Spetsnaz but every bit as capable were the recce units of the VDV air assault brigades, popularly called "the cowboys". The VDV's little BMD airborne vehicles were not durable enough for the rough terrain of Afghanistan, and soon ordinary Army BMP-1s were substituted as we see here with a VDV scout platoon in Nangarhar province in 1982.



The most effective mujihadeen weapon during the war was the mine. The Soviet Army was forced to form special countermine patrols to precede convoys down contested roads. They were usually accompanied by specially trained German shepherd dogs to sniff out plastic and wooden non-magnetic mines that the conventional metal mine detectors could not sense.



A Soviet motor rifleman mans an AGS-17 Plamya 30mm grenade launcher in a camouflaged ambush in Kandahar province in 1985. The grenade launcher was placed aside a frequent mujihadeen convoy province in 1985. Note the soldier's cloth helmet cover, and his flak jacket/ammo pouch. Flak jackets were almost unheard of in the Soviet motor rifle force until several years into the Afghan war.



Soviet specialists examine weapons captured from the mujihadeen in the Jalalabad area in 1985. Jalalabad's proximity to the Pakistan border made it one of the country's hot-spots.



The Sarandoy security forces were a common sight in the streets of Jalalabad, like this patrol riding a BRDM-2 scout car.







An Afghan Army T-54A tank company prepares for action near Urgan in Paktia province in 1985. The crewmen are loading high explosive rounds for the tank's 100mm gun.



A pair of DRA Army T-54A's preparing for action near Urgan in 1985. The vehicle to the left is a T-54B while the tank to the right is an old T-54 Model 1951 which has been rebuilt to T-54B standards. The vehicle to the left carries the national insignia while the one on the right is unmarked except for its original Russian stencilling on the fuel cells.





The Afghan crews of these two T-54s mount up near Urgan, Paktia province in 1985.



One of the main training base for Afghan Army tank crews was in the outskirts of Kabul. This is a staged shot of the Soviet instructors and their new pupils.



The Soviet units in the OKDvA did not have the latest in Soviet hardware. Some artillery regiments were still equipped with the 122mm Model 1938 howitzer, though the newer D-30 was more common.





The Afghan 26th Airborne Battalion was partly mechanized for fighting in the Kandahar area in 1985. They followed Soviet fashion, adopting the striped white and blue tee-shirt. The unit insignia, also patterned on the Soviet style, is painted on the driver's hatch of this BTR-60PB.



A celebration after a cut-off DRA garrison was freed by the 26th Airborne Battalion in Kandahar province in 1985. One of the battalion's BTR-60PB armored personnel carriers is in the background.

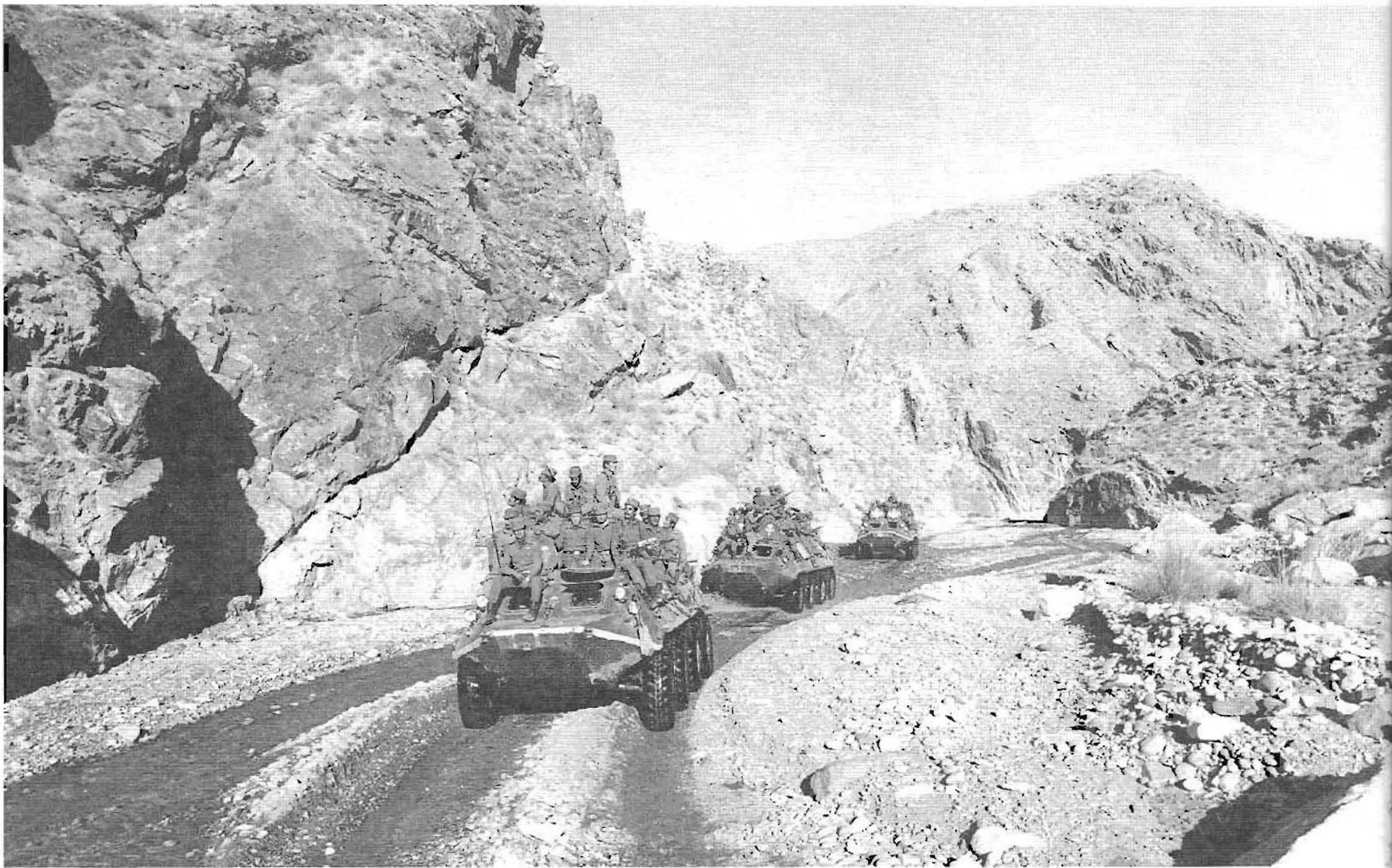


A 26th Airborne Battalion BTR-60PB on patrol in the so-called "Mujihadeen's Ravine" area of Jalalabad in 1985. The susceptibility of vehicles to ambush is very evident in this view.



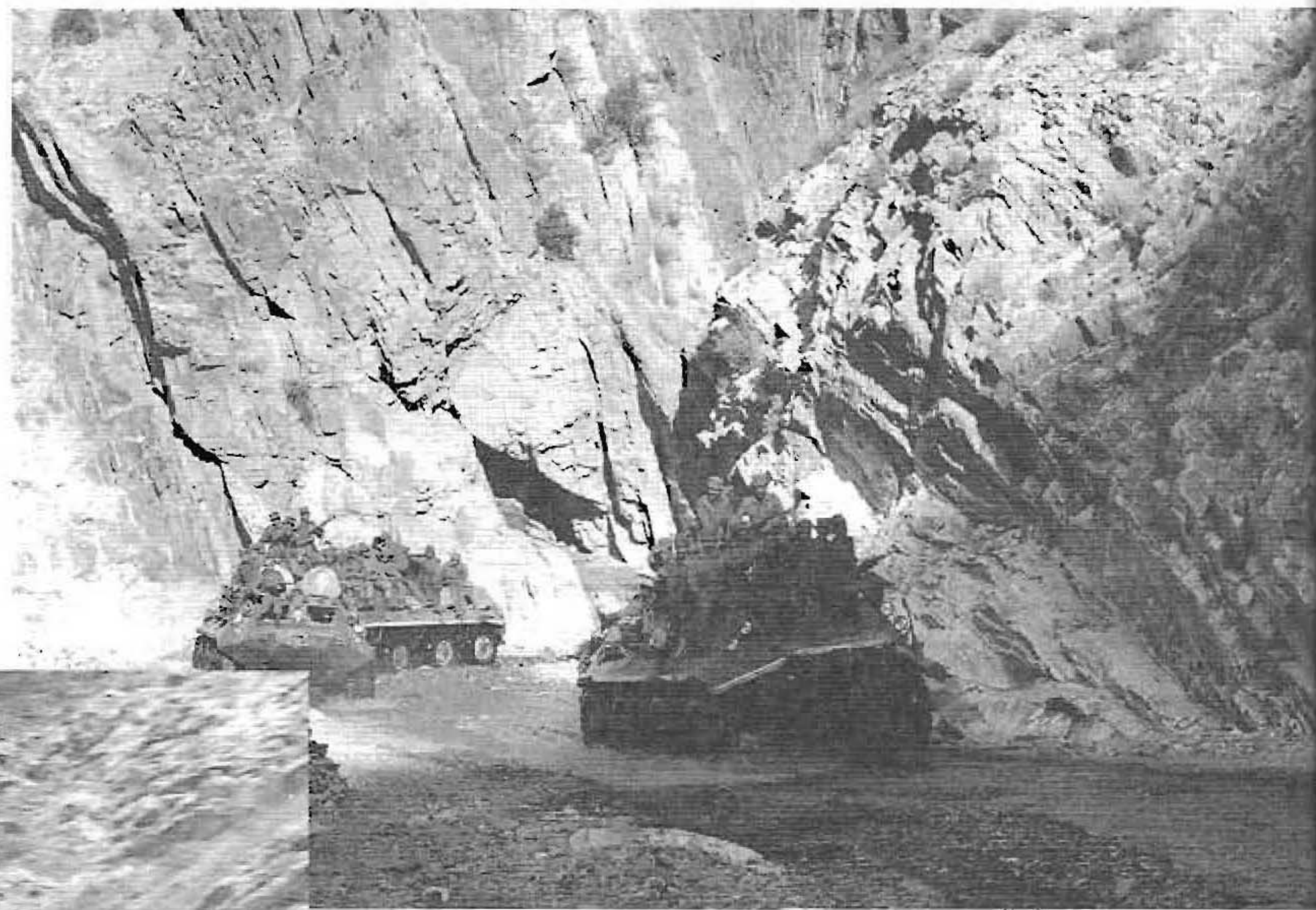
An armored platoon of the Afghan 26th Airborne on patrol in the Mujihadeen Ravine area outside Jalalabad in 1985.





The armored platoon of the 26th Airborne emerges from the Mujihadeen Ravine after their patrol. Careful inspection of the photo will reveal the 26th Airborne insignia painted in white on the commander's hatch and on the plate between the two front viewing ports.

The airborne infantry of the 26th Airborne wore ordinary infantrymen's uniform during operations. The squads are riding outside the BTR-60PB, since mines posed the main threat. A mine explosion could kill the entire squad if it was bottled up inside the vehicle.



BTR-60PB armored personnel carriers of the 26th Airborne during operations near Jalalabad in 1985. This elite unit saw more fighting than most Afghan units due to its greater reliability.





One of the least known Soviet combat units to serve with the OKDvA in Afghanistan was a special Navy Infantry Regiment committed to the fighting in 1985 to clear Paktia province of the mujihadeen. It was some of the most intense fighting of the war to that time. The Soviet Navy Infantry was reequipped with BMP-2D infantry fighting vehicles when in Afghanistan.



A Navy Infantry BMP-2D unit during the Paktia province fighting in 1985. The unit painted its characteristic anchor emblem on the side of the turret, and as we see here, on the right rear exit door. The BMP-2D is the version of the BMP-2 fitted with applique armor (and sometimes called BMP-2E). This unit has added a large water container on the rear deck.



Soviet artillery units in Afghanistan often used the MT-LB tractor to tow their howitzers rather than trucks. Here a 122mm howitzer battery accompanies a BMP-1 motor rifle unit during fighting near Urgan in Paktia province, 1985.



The narrow passes in the rocky terrain near the Pakistan border was a familiar sight to Soviet motor rifle troops like this BMP-1 platoon outside Jalalabad in 1985. A standard Afghanistan modification was the addition of a water container on the rear deck.



Although the BMD-1 airborne assault vehicle was used in Afghanistan, its delicacy led to its eventual replacement with BMP-1 and BMP-2s in the OKD. An exception is this VDV airborne reconnaissance platoon, scouting near the Pakistani frontier in Paktia province in 1985.



A pair of T-62M tanks lead a convoy heading for Jalalabad on the Kabul road in 1985. Tanks were frequently used to provide protection and fire support during these convoy operations.



A BMP-1 motor rifle company moves down a desert track in Badkhar in 1985. BMP-1s like these usually had a storage locker or large box carried on the rear deck for the crew's gear. The interior of the BMP-1 is too cramped to carry all the necessary infantryman's equipment during prolonged field operations.



An interesting view of a T-62M on the Kabul-Jalalabad road. This vehicle has the rubber-fabric side skirts common in the later years of the Afghan war, but is not yet fitted with the BDD turret armor. Instead, the old tanker's trick of protecting the turret from rocket grenades with spare track is being used.





A BTR-70 motor rifle company on patrol to search out mujihadeen units in the Kandahar region in 1985. To help the turret gunner locate targets at night, a pair of additional searchlight was sometimes fitted to the KPVT 14.5mm heavy machine gun as we see here on the nearest vehicle.



A self-propelled artillery battalion, fresh from the Soviet Union, operating in Kandahar province in 1985. The battalion is equipped with 2S1 Gvozdika 122mm sp howitzers, one of the most common types in Afghanistan.



A Soviet T-54B platoon serves as the backdrop for a visiting folk dance troupe, entertaining the unit during a respite in the Kavkaz-85 exercises. Shortcomings in Soviet training forced the Soviet Army to institute more rigorous exercises like these prior to the dispatch of units to Afghanistan.



In 1985, the Soviet Army staged a massive wargame, Kavkaz-85, in the region north of the Afghanistan border. This was used to provide special training for units slated to go to Afghanistan and familiarize them with warfare in mountainous areas. Participating in the wargames were a number of experienced Afghan veteran units. This is a BTR-70 unit which had served in Afghanistan.



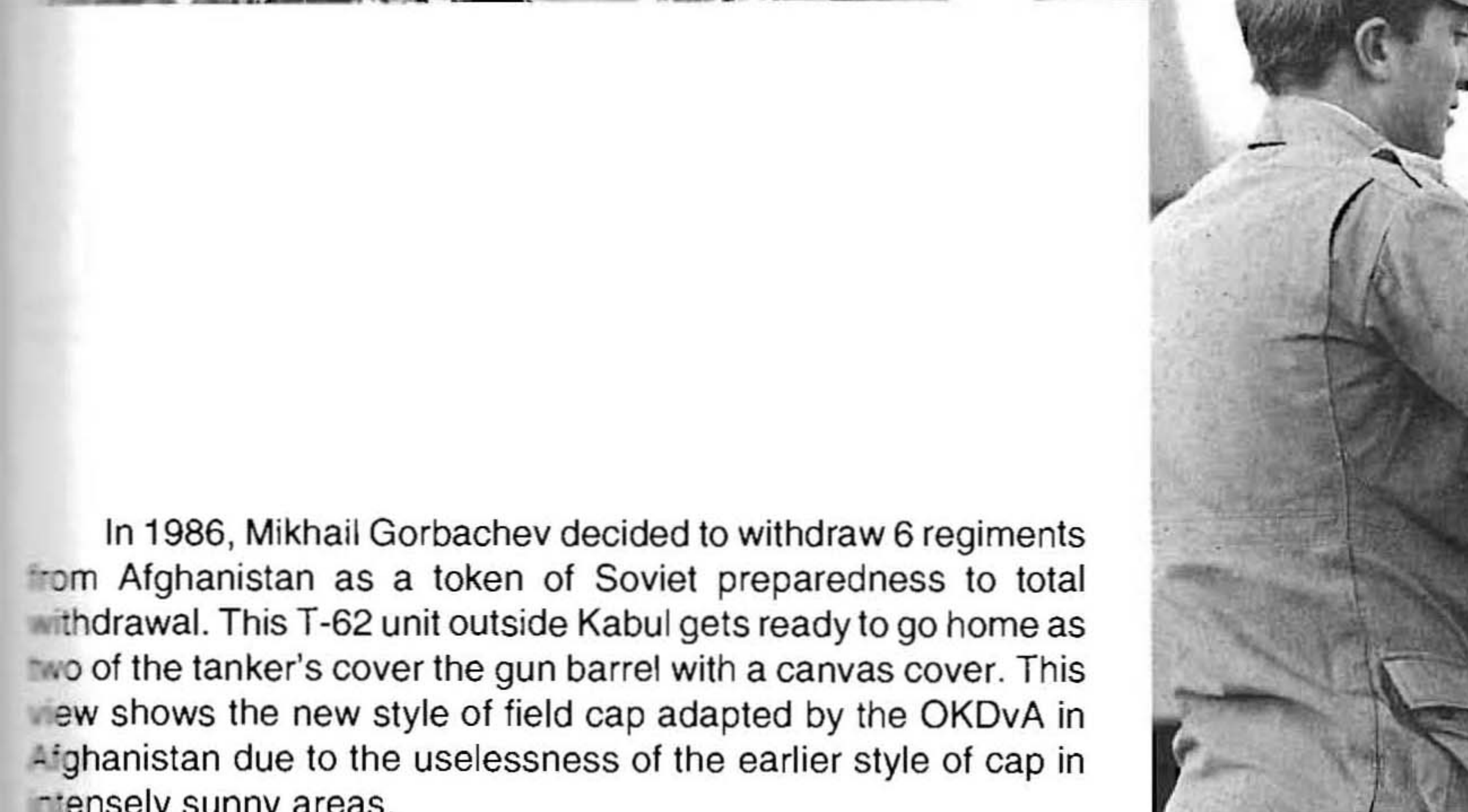
A river-crossing exercise by a T-55 tank during the Kavkaz-85 maneuvers.



Kavkaz-85 placed particular stress on combined arms operations, with helicopters flying top-cover for the motor rifle troops. In this case Mi-24D Gorbach (Hind) attack helicopters cover a BMP-1 battalion.



Soviet troops recently involved in fighting in Afghanistan are greeted by local representative of the Uzbekistan republic north of the Afghanistan frontier. This type of staged affair became commonplace around Termez in Uzbekistan after public disaffection over the fighting became more widespread in Russia. In the background are a BTR-70 and T-62 tank of the returning units.



In 1986, Mikhail Gorbachev decided to withdraw 6 regiments from Afghanistan as a token of Soviet preparedness to total withdrawal. This T-62 unit outside Kabul gets ready to go home as two of the tanker's cover the gun barrel with a canvas cover. This view shows the new style of field cap adapted by the OKDvA in Afghanistan due to the uselessness of the earlier style of cap in intensely sunny areas.



The Berlin Regiment of the 5th Guards Motor Rifle Division gets ready to cross the bridge on the Amu-Daria river returning to Soviet soil near Termez in Uzbekistan as part of Gorbachev's 1988 withdrawals. The Berlin regiment was equipped with T-62 tank equipped with the new BDD horseshoe armor package.



The Guards Berlin Regiment stands for review at Hajrotan prior to their withdrawal over the Soviet frontier in October 1986. All of the tanks have the new BDD applique armor package introduced by the OKDvA in Afghanistan to minimize losses to mujihadeen rocket grenades. The OKDvA was not allotted any of the newer tanks- T-64, T-72 or T-80, since it was felt that the uparmored T-62 was adequate for the job. This was much the same attitude of the US Army towards tanks units in Vietnam.



The Berlin Regiment heads home. Ironically, a T-62M with a mine clear assembly (minus the rollers) leads the procession, much as would have been the case in the fighting itself.





Soldiers of the Berlin Regiment are welcomed with melon from a local representative in folk costume near Termez in Soviet Uzbekistan. The tankers are wearing the old style sun cap, in use in the Soviet Army in hot desert areas since the 1930s. Close inspection of the T-62 immediately behind this group reveals the standard unit insignias, a white lozenge in a circle, and a Guards insignia on the searchlight cover. These vehicles were camouflaged with an irregular pattern of sprayed black stripes over a dark green base.

Besides the tanks themselves, other elements of the 5th Guards Motor Rifle Division were withdrawn in October 1986, including these 2S1 self-propelled howitzers.



Fuel for units operating near the Afghan-Soviet border along the Termez-Hajrotan road was provided by these pipelines. Mujihadeen sabotage meant that repairs were frequently needed, leading to the formation of special armored engineer detachments like this one which patrolled the pipeline and fixed any damage. In the background is their BTR-70, modified to carry spare pipe and other equipment.

By 1987, a "safety ring" had been established around the capital city of Kabul to prevent infiltration by mujihadeen forces. This Afghan Army T-62 was used to patrol the safety ring. It is fitted with the usual sand-skirts.







A Soviet motor rifleman instructs two Afghan soldiers on the operation of the AGS-17 30mm grenade launcher. The Soviet trooper wears the new accoutrements of Afghanistan- flak jacket and helmet cover.



Head of the Afghan government after the ouster of Babrak Karmal in 1986 Najeib Najeibollah visits the Armored Force School outside Kabul in 1987. One of his bodyguards looks at the cameraman suspiciously.

A Soviet BMP-2D sits 30km outside Kabul as part of the new "safety ring" outside the city. It is painted in the usual camouflage-black and brown over the normal green color, with its tactical number painted in large block numerals on the armored side skirts.



A line-up of T-62 tanks at Mazari-Shariff in northern Balkh province. The main Soviet tank depot was located there where all tanks needing significant repair or upgrade were sent for work.





A T-54B of the DRA Army's 1st Armored Division on the road to Jalalabad in 1987. Many of the T-54s and T-62s were modernized with the skirts, intended both to keep down dust and to offer some stand-off protection against rocket grenades.



A DRA weapons exhibit in Kabul in 1987. In the foreground is a 5P73 quadruple launcher for the S-125 (SA-3 Goa) air defense missile. Behind it is a ZSU-23-4 Shilka air defense gun vehicle.





An Afghan Army T-62 tank with its 115mm gun ammunition on display in front of it. Afghan tanks were seldom camouflaged. In the Kabul area, they often carried the national insignia on the turret as seen here; this was less common in the field.



A DRA Army motor infantry unit during fighting around the city of Pagman, 50 km west of Kabul in 1987. In the foreground is a BTR-60PB armored personnel carrier, behind it a T-55A and a BMP-1.



A VDV Air Assault Battalion moves into position on the outskirts of Shinand Air Base in Farah province near the Iranian frontier in 1987. The VDV airborne forces traded in their small BMD airborne vehicles for the more durable BMP-2 and BTR-70. The VDV insignia can be seen on the turret sides of the BMP-2Ds in the center and left side of the photo.





Armored recovery vehicles like this T-55 derivative were modified for use as mine sweepers, a much more necessary task during the war. This vehicle has the attachments for the usual KMT mine rollers on the lower bow, though the rollers themselves are not fitted.



The Soviet used fire bases much as did the US Army in Vietnam. This base was located on the road to Pagman, where there was extensive fighting in 1987. Two T-62 tanks were located on either side of the main bunker for fire support.



A T-62M tank at a fire-base on the Pagman road. These tanks provided fire support for local Soviet bases, evidenced by the heap of spent shell casings in front. This particular T-62M is fitted with the BDD applique armor kit.





The commander of a DRA Army T-54B tank during the fighting around Pagman in 1987. Evident in this view is the DShK "Dushka" 12.7mm machine gun. The Afghan tanks seldom had the BDD armor kit until after the Soviet withdrawal.



A DRA Army T-54B tank during the fighting near the city of Pagman in 1987. It is fitted with side skirts, a modification first used during the war, but does not have the applique armor kit.



A formation of BTR-70s patrol a road near Pagman during the fighting there in 1987. Off the side of the road is a burned out MT-LB armored transporter.



A Soviet Army BM-21 Grad battery firing its rockets against mujihadeen positions near Pagman in 1987.



One of the most necessary, but dangerous jobs, was that of countermining. This is a patrol from a Special Reconnaissance Counter-Mining Group carrying out a sweep during the fighting around Pagman in 1987. Two of the engineers have dogs to sniff out mines, two have probes, and one has a magnetic mine detector. All wear flak vests.

A good close-up study of the officer leading a Special Reconnaissance Counter-Mining detachment during the Pagman fighting. The troops are carrying grenades and marker flares in their flak-vest pouches.



A Soviet VDV airborne artillery unit fires its D-30 122mm howitzer towards mujihadeen positions during the 1987 Pagman fighting.



A joint Afghan-Soviet command center during the Pagman operation near the Pakistan border in 1987.



A pair of scouts from a Special Reconnaissance Counter-Mining Group during the Pagman fighting. The flak vest pouches could carry grenades, but in scout group, marker flares were a more common type of ordnance. The dogs were essential for finding the plastic Italian mines so popular with the mujihadeen forces.





A BMP-2D motor rifle platoon near Gardez, Paktia province in 1987. Notice the change in uniform of motor rifle troops from the photos earlier in the book. By now, flak vests have become standard, as have helmet covers and camouflage coveralls. The BMP-2s are the new- D version with applique armor. The view of the BMP-2 to the left shows how this armor was spaced out, away from the hull.



The 2B9 Vasilek 82mm automatic mortar was ordinarily towed by an MT-LB Afghanistan. Some units made a improvised self-propelled version by mounting the mortar on the rear deck as seen here. (David Isby)



Soviet tanks in Afghanistan were used, as often as not, as mobile fire support artillery. A major problem was providing enough ammunition during these fire-support assignments. As a result, the Soviets developed a simple armored trailer which could be towed behind the tank, carrying additional ammunition as seen here.





A platoon of BMP-2Ds of a Soviet motor rifle regiment in a *kishlak* (village) near the Bagram air base 60 km north of Kabul in 1987. The troopers are wearing their helmets in the usual Soviet fashion- over their fur caps. The vehicle further in the background has an inscription on the side skirt. These inscriptions were typically made in memory of crew members who had been killed while serving on a particular vehicle.

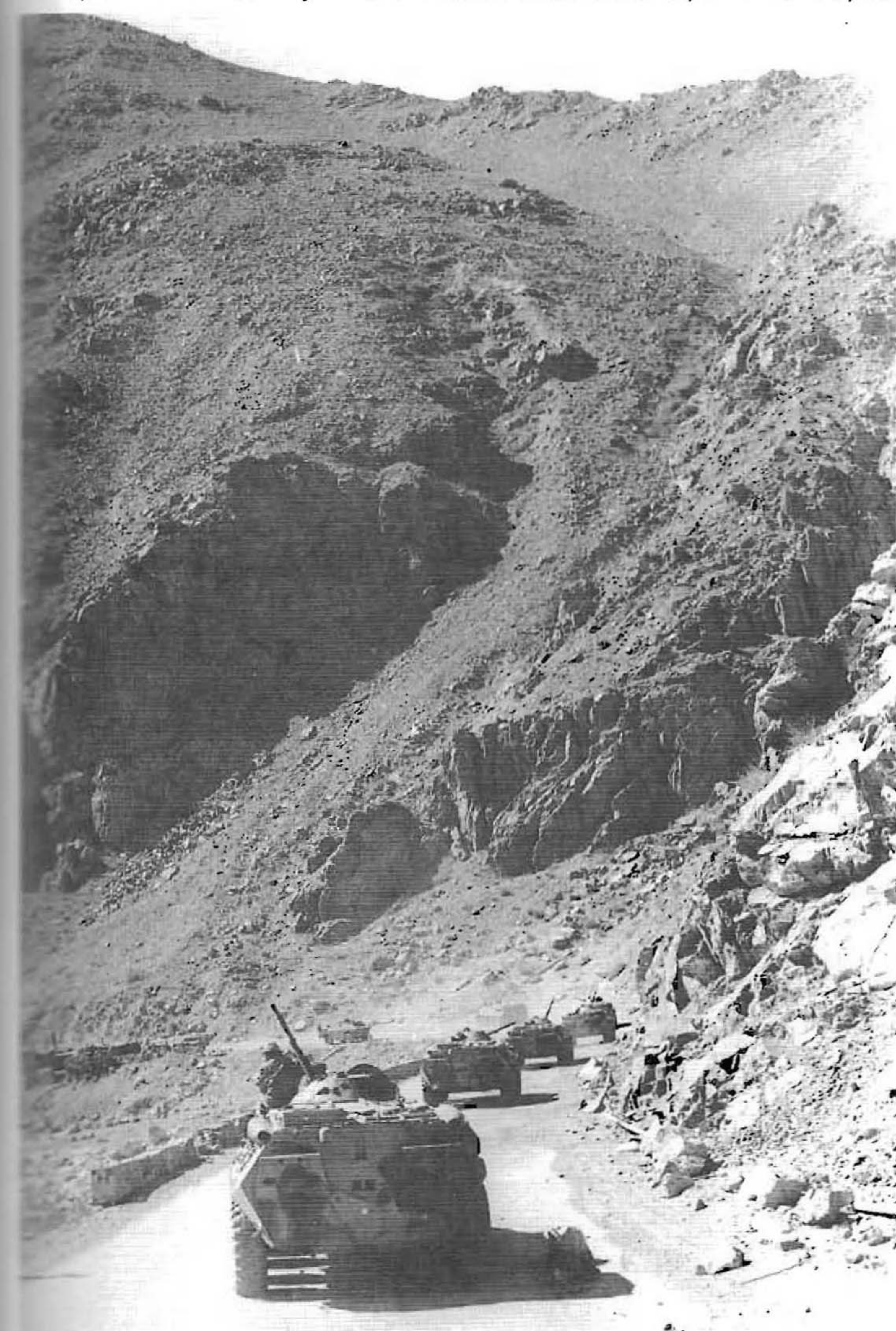


Another view of the same BMP-2D unit in the retaken *kishlak*. The camouflage scheme on the vehicle is a dull sand color over the base dark green.





Some of the most persistent fighting of the war took place along the approaches to the Salang tunnel, the main conduit for convoys between Kabul and the Soviet Union. A Spetsnaz unit was finally organized from the unit at Salang to prevent infiltration into the tunnel by mujihadeen guerillas. They were used also to help ambushed convoys near the tunnel entrance. Troops from this Spetsnaz unit await an assignment on their BRT-70s and BTR-80s near the tunnel.



A column of BTR-80s from the vanguard of a convoy moving up the Salang valley towards the pass. The narrow valley was a nightmare for the convoys, and an ideal ambush location for the mujihadeen.



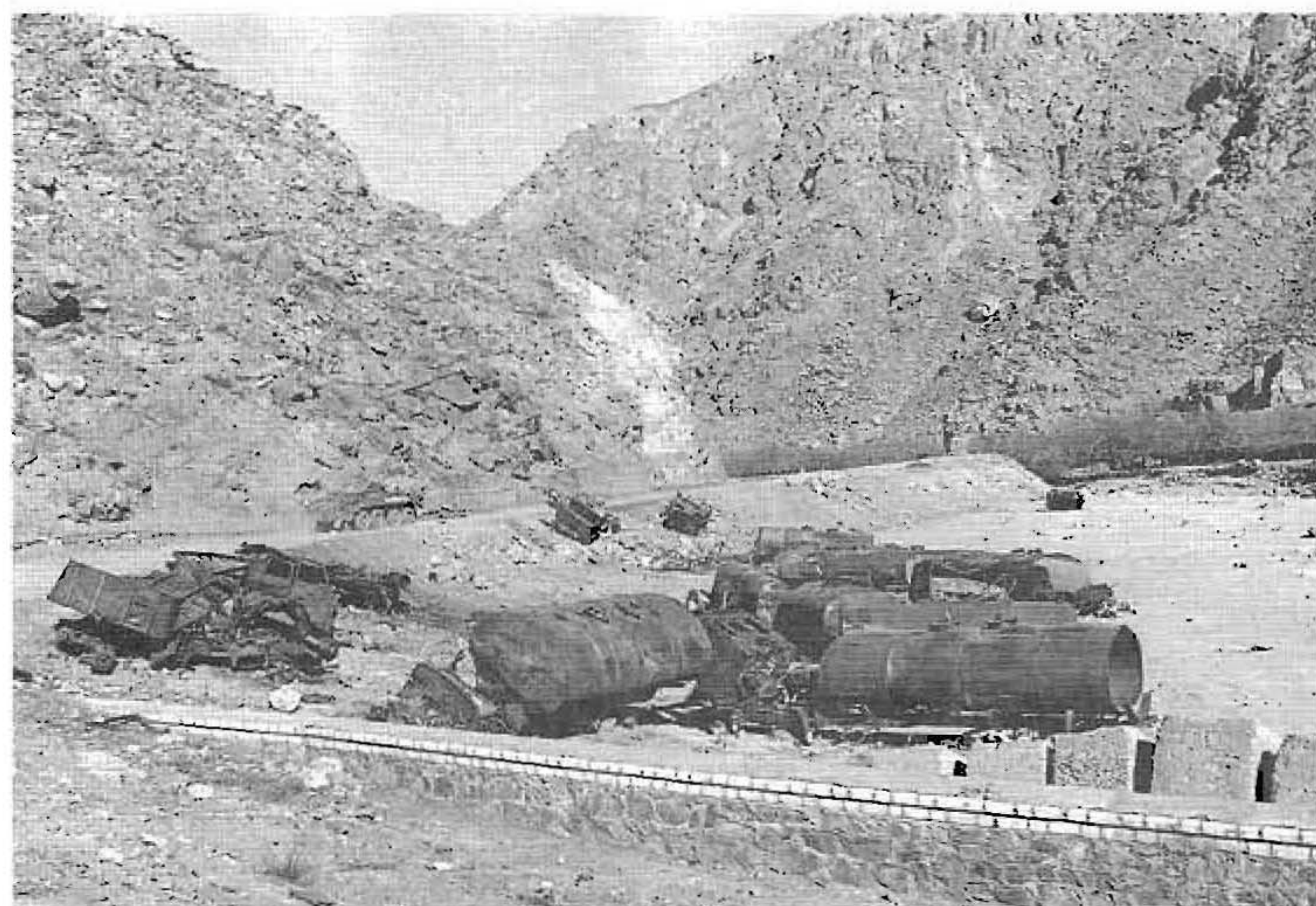
Some evidence of past battles along the Kabul-Salang road, the burned out carcasses of Soviet fuel trucks. Barely evident along the road to the left is a BTR-70 of the Road Traffic Control branch, marked with the characteristic winged K.



BTR-80s escort a convoy down the final stretches of the Salang Valley as they approach the tunnel.



Not widely known, there were small numbers of Soviet female troops during the Afghan War, mainly in medical and communication positions. This ensign-nurse was assigned to a motor rifle unit in the Salang area in 1987.



Another view of the graveyard of vehicles leading towards the Salang tunnel.



In an effort to keep the mujihadeen out of the Salang Valley, Afghan artillery positions were formed in the area. This unit used an old ZIS-3 76.2mm divisional gun, a type not commonly seen in the better equipped Soviet units.



Winter could be nearly as bad as summer along the Salang pass, the weather only contributing to the misery. Here, snow covers a convoy headed to the tunnel. In the lead is one of the new BTR-80 armored personnel carriers. The BTR-80 had a new turret mounting which permitted the main 14.7mm machine gun to be elevated higher to reach enemy troops located far up the hill sides.



One of the bloodiest battles of the war, codenamed Operation Magistral by the Soviet, took place in November-December 1987 when the Soviets tried to break through mujihadeen positions to crack the encirclement of the garrison at Khost. Here, Soviet motor riflemen prepare for the operation, their flak vests packed to the limit with signal flares and grenades.



A DRA Army BMP-1 moves down the road towards the Khost area in 1987.



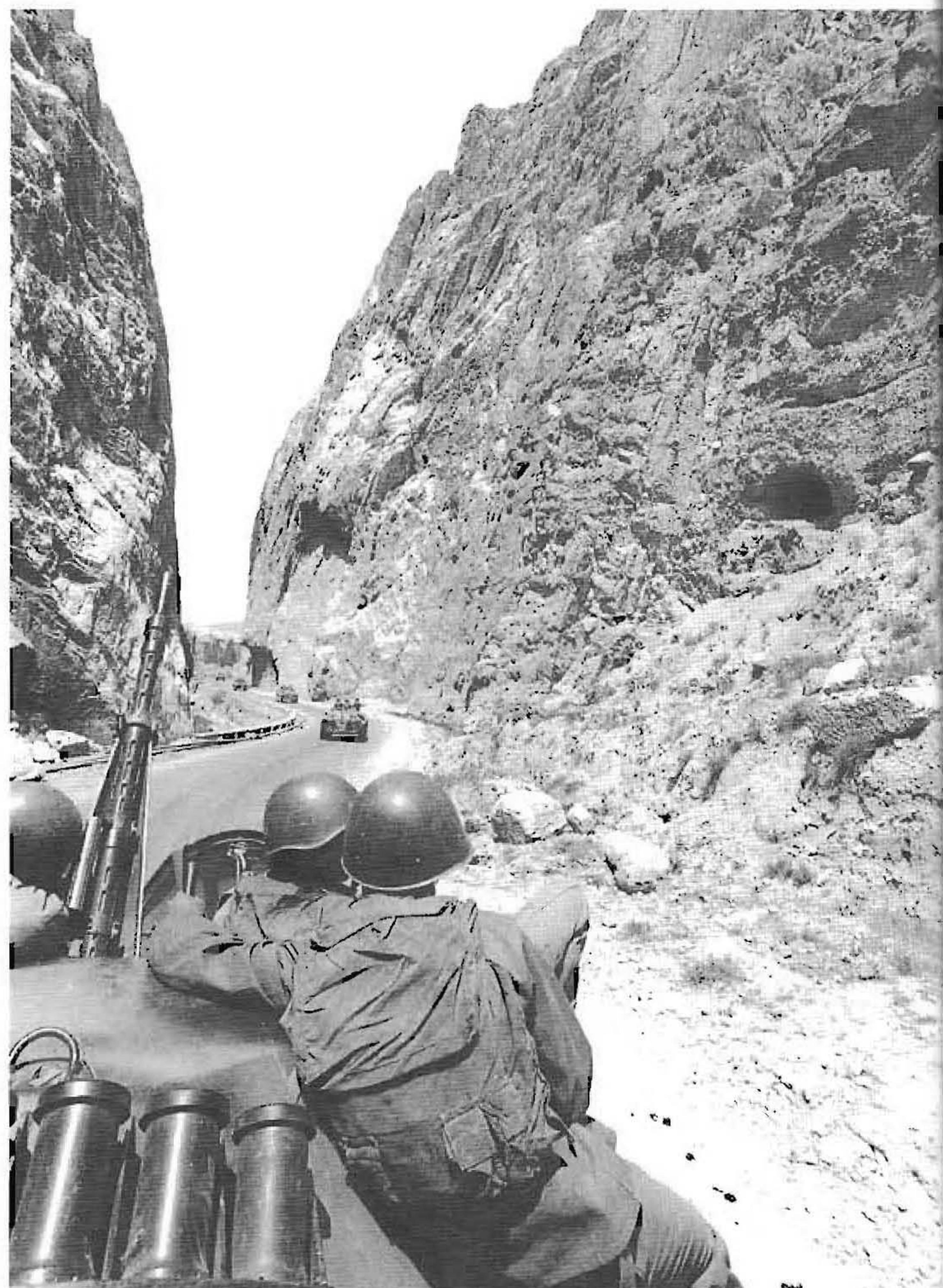
One of the most time-consuming and dangerous aspects of Operation Magistral was removing the thousands of mines along the Gardez-Khost road.



Troops of a VDV airborne assault unit wait their turn during the fighting at Khost in 1987. The airborne troopers hardly ever were used in their usual role as air mobile troops, being used instead as ordinary infantry. Their superior training and morale made them more valuable for difficult assignments than the conscript motor rifle troops.



A VDV air assault platoon dismounts from their BMP-2Ds to clear an area along the Gardez-Khost road.



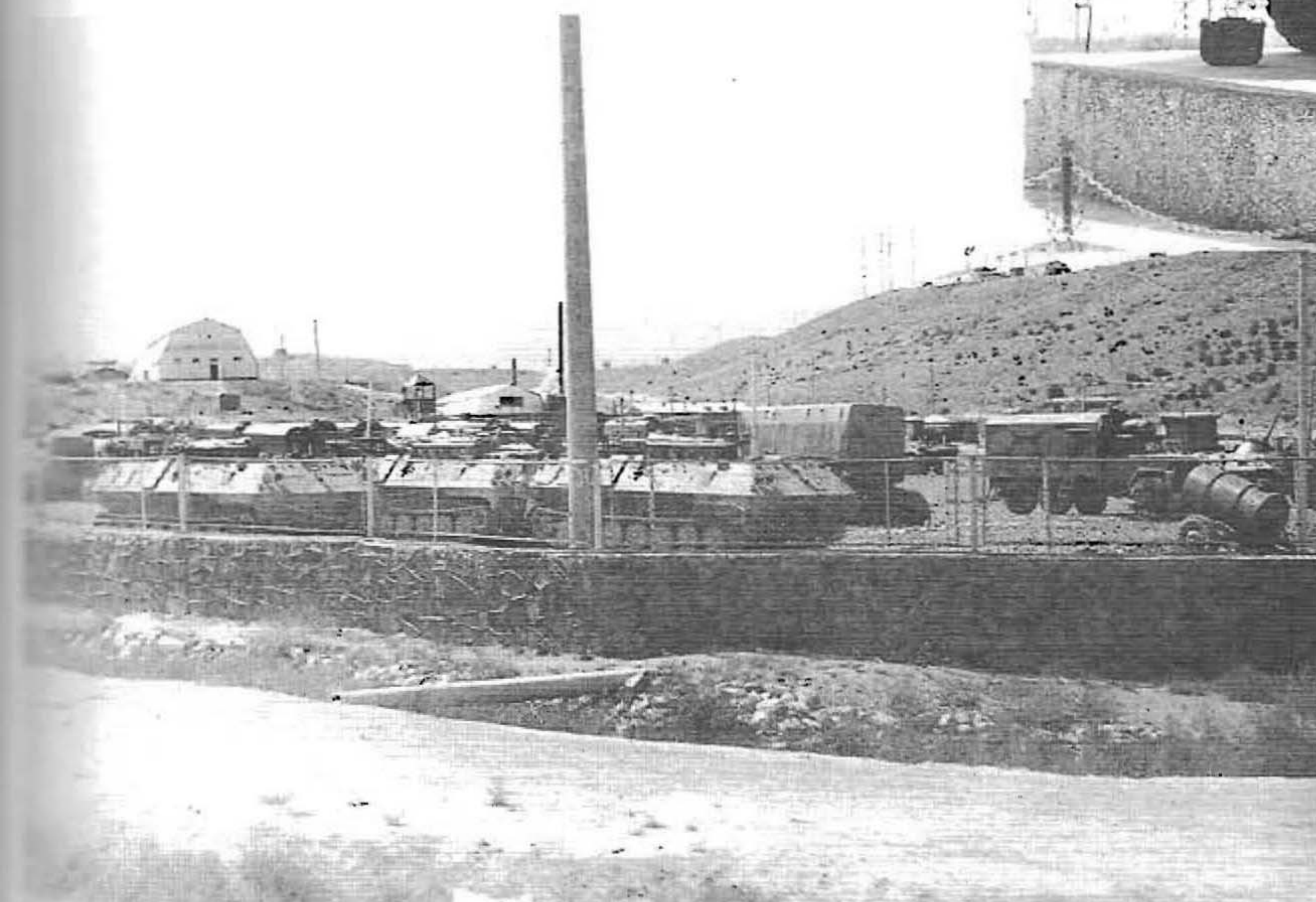
Geography was as much an obstacle as the mujihadeen during the Khost battle. These narrow mountain passes were ideally suited to ambushes.



The main battle tank of Soviet forces in Afghanistan was the T-62. By the time of the 1987 Khost battle, many had been modified with the BDD applique armor kit. This made them nearly invulnerable to RPG-7 rocket grenades, at least in their forward sections.



This particular BTR-60PU command vehicle, number 103, was used by the Signals Regiment commanded by Konstanty I. Bielov in the Kabul area. It was almost destroyed by a mine at Alkhal in the Khost area in 1986. It was repaired and later installed as a monument at the regiment's base near Kabul with a regimental pennant painted on the hull side. This was the last Soviet regiment to withdraw from Kabul.



The Bielov's Signals Regiment in Kabul shortly before the withdrawal. In the foreground are three 1V12 command and control vehicles.

Another view of Bielov's Signals Regiment. What is especially interesting about the photo is that the Crown Palace is evident in the background. The Palace was the scene of the first major battle of the Soviet invasion when a combined KGB-Soviet Army team assaulted the palace to capture the Afghan leader Hafizullah Amin. Amin was protected by a special guard unit and it took T-62 tanks to help get the Soviet commando teams into the palace.





Packing up and going home. A Soviet D-30 howitzer crew cover their weapon before the long ride home.



Departing Soviet troops left behind some of their equipment to the DRA Army. Here, a new BTR-70, with an AGS-17 30mm grenade launcher mounted on the roof for added firepower.



One of the authors, Wojciech Luczak, accompanied one of the Soviet units as it left Jalalabad on the Pakistani border for Kabul and the final trip back to the Soviet Union in May 1988. Here, Wojciech and his Afghan bodyguard pause for a picture high in the Hindukush mountains on the way to Kabul in front of a BTR-80 armored personnel carrier.



The crew of the BTR-80 makes some final maintenance checks on their vehicle before proceeding ahead. This is no place to have a flat tire or a sprung radiator!



The VDV air assault unit's convoy, commanded by Col. Starov, was led by a BTR-60PU communications vehicle under the command of Maj. Gorishko. The BTR-60PU has an extendible mast for long range radio transmission.



The bulk of the convoy was made up of BTR-70s, BTR-80s and BMP-2Ds. This is one of the new BTR-80s.

This BTR-80, number 241, had a special marking on the turret in honor of Corp. Alexander Ponomarev. Ponomarev was "241's" driver on 22 May 1987 during a convoy escort assignment near Jalalabad. He was fatally wounded during an ambush that day, but managed to drive the vehicle out of enemy fire before dying. During the May 1988 withdrawal, 241 was used as the company commander's vehicle, under the command of Capt. Andrei Kolesnik.







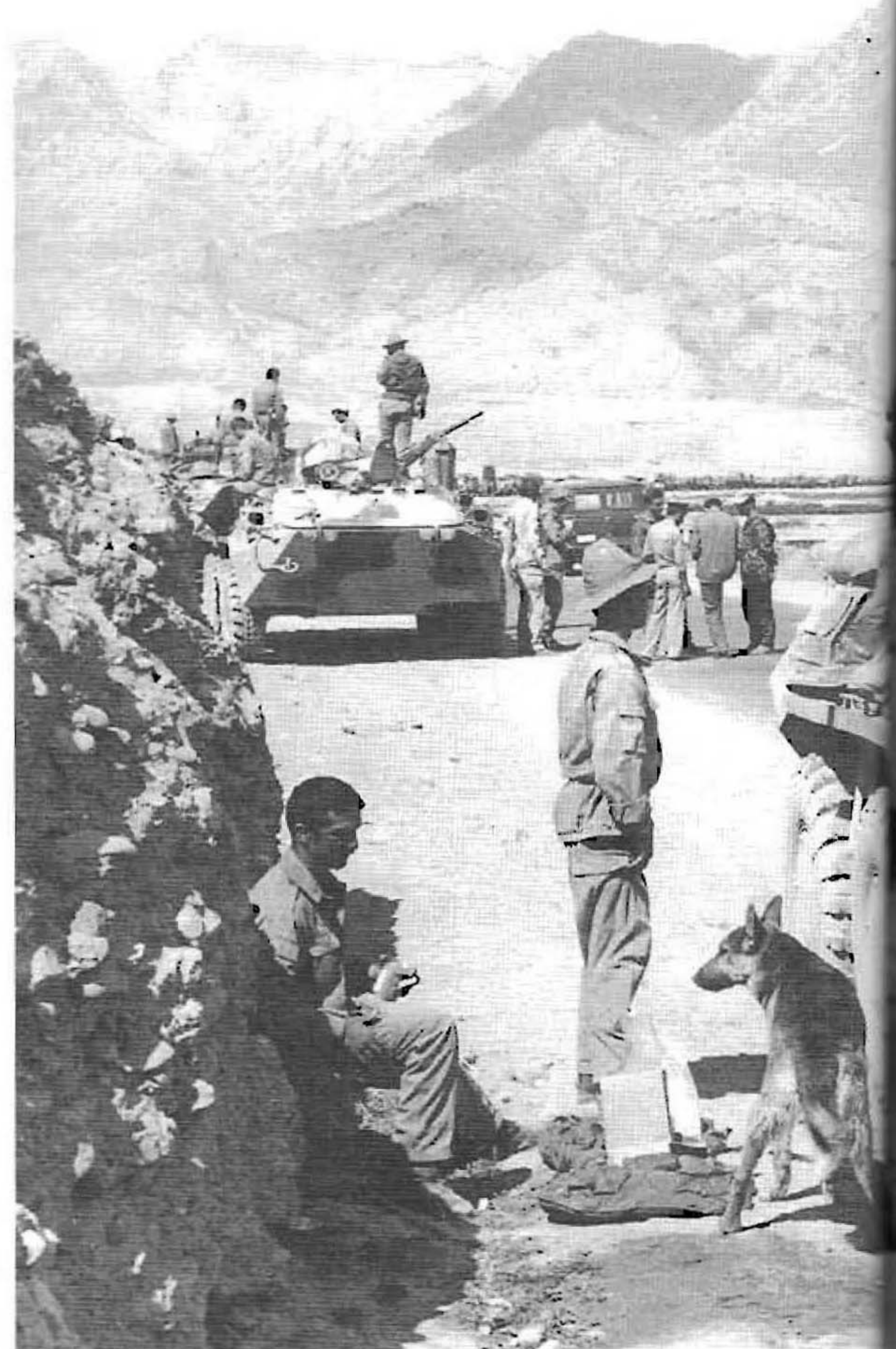
The column makes one last stop on the approaches to Kabul in May 1988.



On the outskirts of Kabul, the convoy receives an escort from Kabul traffic police. The police car has Traffic written out in English, a reminder of past British ties to the region, but a Russian Cyrillic letter designator on the licence plate.



The headquarters staff of the VDV has a meeting on the Jalalabad-Kabul road shortly before arriving in the capital.



Another view of 241. Capt. Kolesnik can be seen sitting on the turret.



A clear side view showing BTR-80 No.241 with the honorific marking.





the gear of the mine dog.



marking side. This type of marking was common in many units.



The BTR column as it approaches Kabul. The BTR-60 and BTR-70 were widely used for convoy escort duties on these roads, their high road speeds being especially appreciated in the event of ambushes.



A front view of the command BTR-60PU at the head of the column.



The column begins to pass the gate to the DRA Army 1st Armored Division base outside Kabul. Notice that an old C.V.35 tankette sits as a monument at the entrance to the base.





The Jalalabad garrison convoy after passing through Kabul headed north to the Hajrotan crossing on the Amu-daria river opposite the USSR frontier.



The troops are dismounted from their transporters for a last ceremony with Afghan representatives from the neighboring villages.



The Jalalabad column was held up for one last time for a ceremony before crossing back into Soviet Union. Here the garrison's BTR-80s wait for further instructions.



At long last, the column gets moving again towards the Amu-daria river bridge.

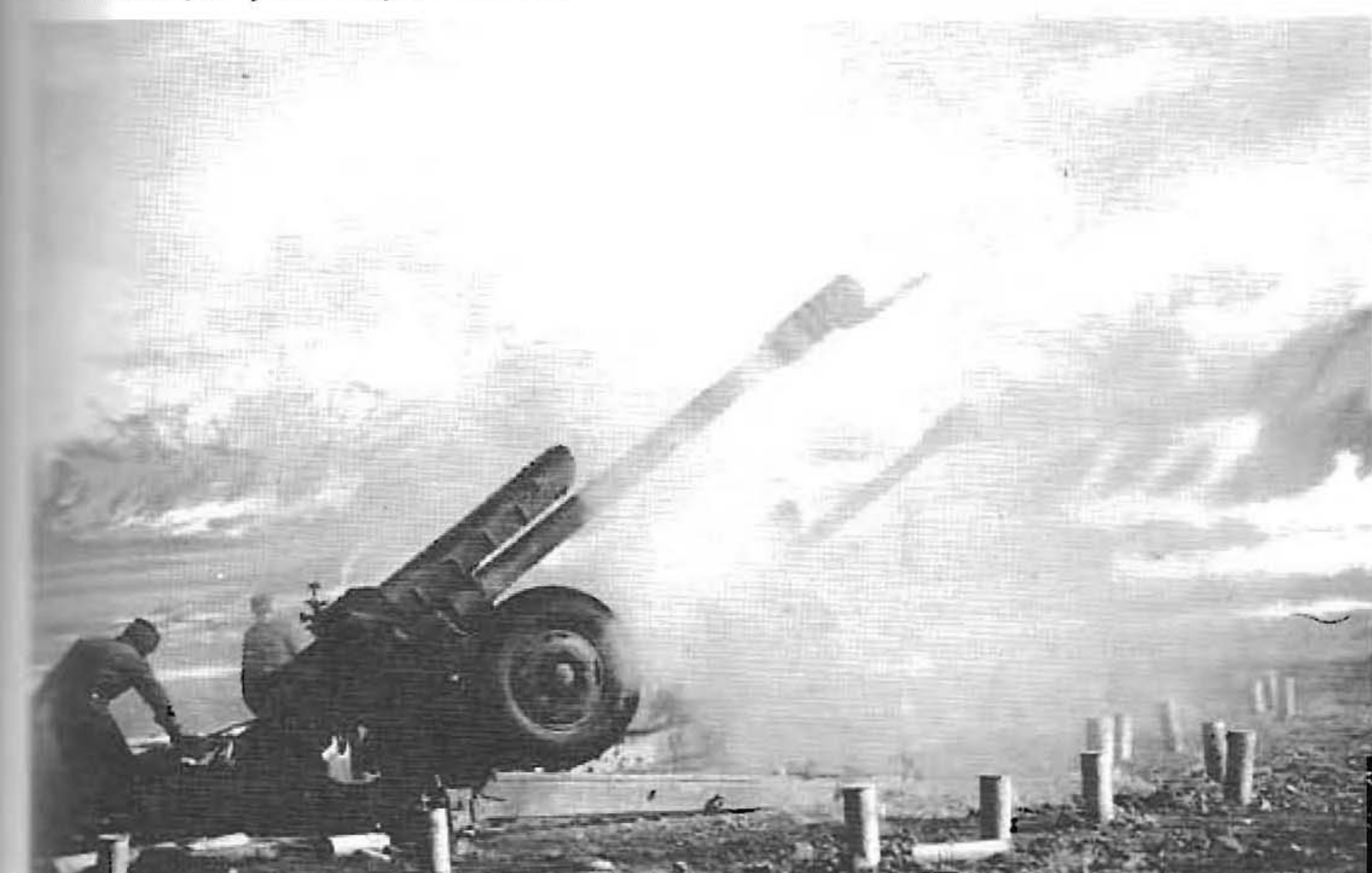




The Amu-daria river bridge is guarded by a single ZSU-23-4 Shilka. The Shilka is designed for anti-aircraft use, but was used in Afghanistan as fearsome anti-personnel weapon.



Several of the vehicles in the column received political banners from the unit's political officers. In the case of this BTR-80, the banner reads: "Homeland! You can pin your hopes on us!"



Even after the withdrawal of Soviet troops in 1988, the war did not end. Here, D-30 122mm howitzers of the DRA Army fire on mujihadeen positions during the fight for the Abbasak pass in March 1990. The pass was one of the key mujihadeen defenses isolating the encircled city of Gardez during the winter 1990 fighting.



The final ceremonies in Hajrotan before the Jalalabad garrison returns to the USSR. All the troops wear the new pattern soft field cap, first introduced in Afghanistan several years before.





Afghan BM-21 Grad multiple rocket launchers bombard mujihadeen positions on the Kabul-Gardez road in the Loagr valley, March 1990.



An Afghan DRA Army T-54 awaits orders during the fighting along the Abbasak pass in February 1990. The vehicle is fitted with a KMT-4 mine roller



An Afghan Army BMP-2 column patrols the Kabul-Gardez-Khost road in the vicinity of the Abbasak pass in February 1990.



A BMP-1 remains shielded behind a burned out building during an Afghan Army counter attack on the outskirts of Kandahar in the Spring of 1990.



The Soviet turned over a brigade of 9P117 Uragan launchers for the R-300 Zemlya ballistic missile to the DRA Army in 1987. Better known in the West as the SS-1c Scud B missile, the 9P117 launcher vehicle is popularly called *Keshalot* (Sperm Whale) by its Russian crew due to its massive size. Over 1000 Scud missiles were used to bombard mujihadeen positions through 1991.



The R-300 Zemlya (Earth) missile brigade was protected by a special Afghan commando unit. There have also been reports that a number of Soviet advisers still are present to help operate these weapons.





KamAZ-5410 trucks with on-board fuel tanks moving in convoy. This vehicle is a 6 X 4 pattern with a maximum towed load capacity of 19,000kg.



KamAZ-5410 "bowser" trucks in convoy pass a BTR-80 A.P.C. doing point guard duty.



Rear 3/4 view of a KamAZ-5410.





One of our authors on the road to Kabul in 1988. The BTR-80 is camouflaged with sand-grey splotches over the usual dark green.



The BTR-60PU command vehicle from the Jalalabad VDV unit under Maj. Gorishko's command.





The crew of Maj. Gorishko's BTR-60PU prepare for the next leg of the journey to Kabul.



One of the BMP-2D's of the Jalalabad VDV convoy was named in honor of Viktor Rudometov, a crew member killed in earlier fighting.



The withdrawal was accompanied by many ceremonies, with the vehicles eventually becoming covered with flowers and corsages. Nevertheless, most of the VDV troopers kept their flak vests on.



A BTR-70 of the Jalalabad convoy. Careful inspection of its side will reveal that it is covered with "kovriki", a type of non-metallic applique armor used to reduce its vulnerability to heavy machine gun fire.



A close-up of the turret marking on BTR-80,241. The marking consists of a red flag with the inscription in yellow: "Crew named in honor of holder of the Order of the Red Banner A. Pononmarev". In front of it is the unit tactical marking, a stenciled white star with the number 14 inside.





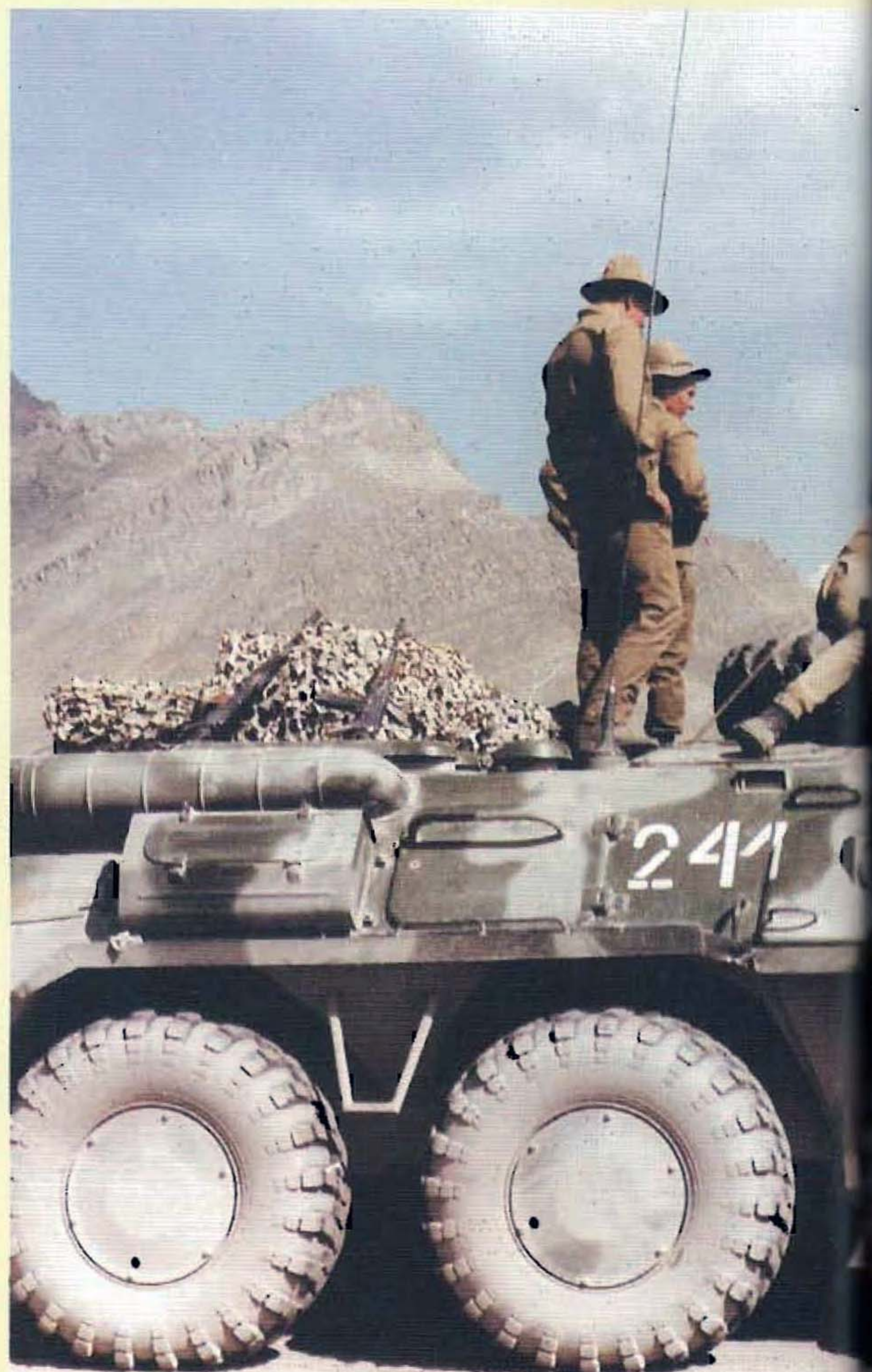
The two lead BTR-80s carry the regimental flags on their way to the bridges back home.



The Jalalabad VDV column shortly before their transit into the USSR.



The crew of a BMP-2D on the way home to the USSR. This particular vehicle is one of the later types fitted with kovriki armor on the turret sides.



A clear side view showing BTR-80 No.241 with the honorific those of the Second World War, nearly always being memorials to in Afghanistan.



A column of vehicles including BMP-2Ds and BTR-80s of the 1988 withdrawal.





turret side. Honorific markings in the Afghanistan war were very different from  
to be killed during previous battles. This type of marking was common in many units



the MT-LB previously stationed in Jalalabad making their way down the Kabul road during



Two BRDM-2 recce vehicles. The addition of an extra wheel chained to the turret is not unusual under field conditions. The turret of this vehicle (as well as the BTR-60/70/80) has no upper hatch so the wheel will not restrict a rapid exit. Turrets are traversed to the rear.



Armoured Command Vehicle fitted with DShK 12.7mm



MT-LB towing D-30 122mm howitzer. The cammed box on the MT-LB is probably filled with ammo or gas cans.





Column of 2S1 122mm S.P.G.'s. Afghanistan has presented the modeller with an exciting opportunity to expand upon the usual single colour scheme of Soviet equipment.



BMP column with Vasilek mounted on MT-LB. This one is a more permanent mount with ammo boxes at hand and the wheels removed.



BTR-80 well stowed. Note the well worn tire on the turret and the misc stores on the rear deck, including several mattresses. MAZ-537 and a BBV in the rear.



Checkpoint BTR-80, UAZ light truck and a Canadian U.N. observer



Column of BTR-70 and a BMP-2. All well worn and weary vehicles





standing for the camera.



A column of BTR-80's pass the BTR-80 checkpoint.



BMP-1KSh command vehicle. This unarmed vehicle has a telescoping antenna mounted in the turret front which looks very much like a large-bore gun.



SA-13 Gopher surface-to-air missile vehicle with missile canisters folded in the travel position.



Close-up of a T-62 with add-on armour, laser rangefinder and thermal wrapping.



BRDM-3 AT-5 Spandrel vehicle. Note that the launcher is in the semi-retracted position. The vehicle normally travels with the launcher fully retracted.

Close-up of BMP-2 nose with PK machine gun on a tripod. At marked odds with NATO practice, every round for the PK is a tracer.



Mi-8 Hip on a pre-fab runway.



ACRV's (Armoured Command and Reconnaissance Vehicles) pass a Canadian U.N. observer.



A battery of 2S3 152mm self-propelled guns moving in convoy. The "grilled" plate on the lower glacis is rear spade, which can also be stored on the rear upper hull under the rear turret overhang. While the "business" end of the artillery battery is six guns, the bulk of the unit's vehicles are either wheeled/trucked armoured support vehicles (ACRV's, command vehicles and radar vehicles) or soft-skinned vehicles. SSV's make up by far the largest portion of the unit's bulk.



Following the last 2S3, (note the glass-fronted bad weather cover for the driver, a very recent innovation for the Soviet Army) are a number of soft-skinned support vehicles. These would include maintenance, communications, general duty as well as logistic vehicles.



Soft-skins supporting the battery include URAL-375's (including a technical vehicle bearing a "pod" mounted in a normal cargo configured bed. This is also a new innovation in the Soviet Army who have traditionally tailored specialist vehicles for special tasks).





PRP-4 radar vehicle which mounts the "Small Fred" radar. This vehicle is based on the BMP chassis and was the first BMP variant to mount the larger two man turret. The PRP-3/4 vehicles are very similar to the recce vehicles BRM and BRM-1. PRP mounts only a 7.62mm MG as a main armament.



ACRV with the whole crew up for some fresh air. Unless you have some personal experience to fall back on, it is difficult to understand how hot, dusty and dirty the inside of an armoured vehicle can be.



ACRV passing a BTR-80 on guard duty.

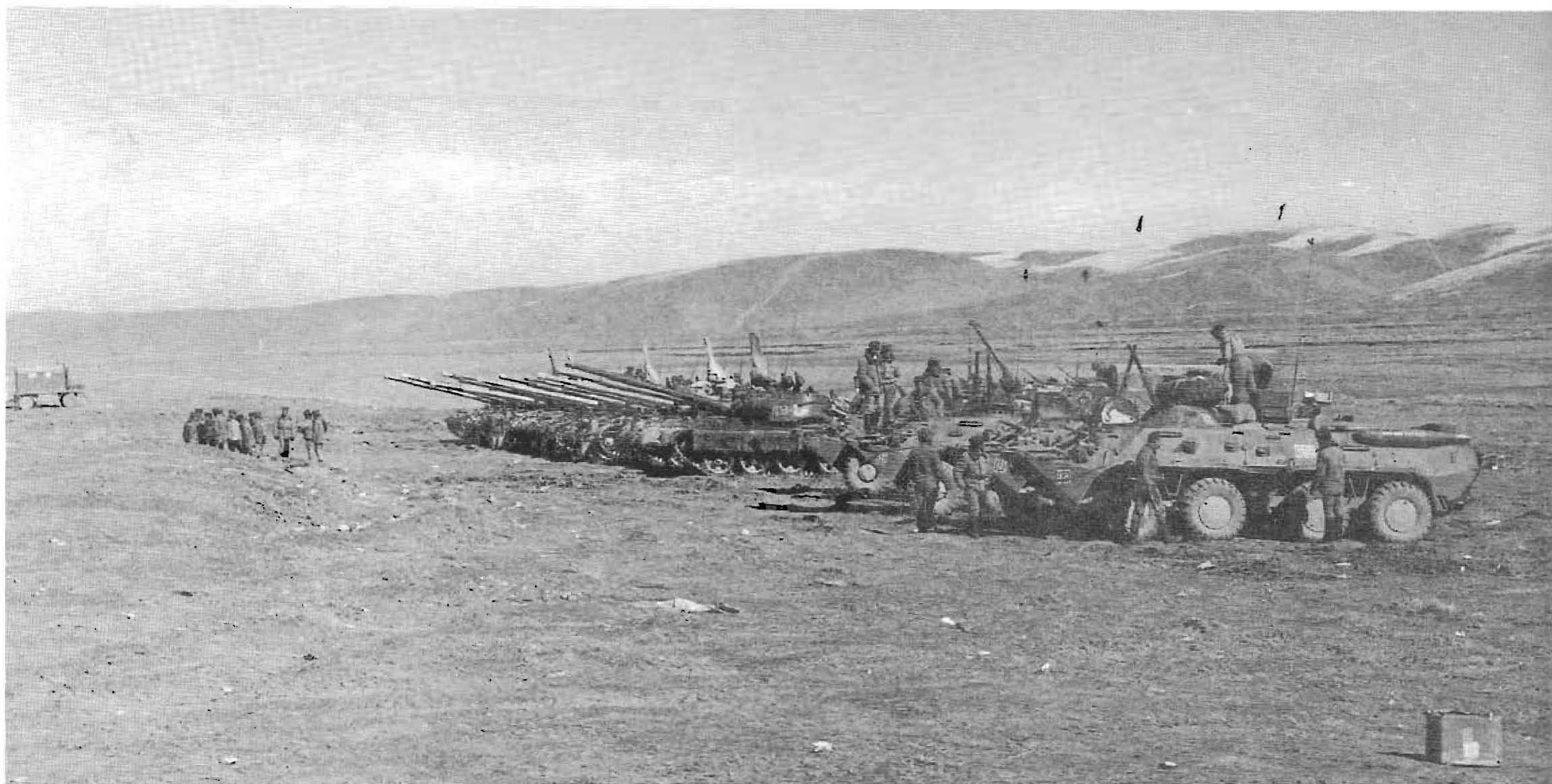


Very interesting shot of a maintenance area "at work". To the left is a ZIL-131 with a light "A"-frame doing an engine change on a BTR-80. This photo contains a vast variety of Soviet soft-skinned vehicles including Gaz-66, URAL-375 and Maz 214's. The vehicles behind the maintenance area are staging into convoys for a road move.



Staging area for various soft-skins and BTR-80's.





Preparing to move, a tank company with T-62's fitted with add-on armour, BTR-80's and a URAL maintenance vehicle.



A mixed column of wheeled and tracked vehicles. 71-40 is an ACRV.



Armoured column with an ACRV and MT-LB's.



Mixed column with SA-13 Gopher SAM TELs (Transporter-Erector-Launcher) bringing up the rear. The SA-13 missile is folded down into the travel position. The wisdom of deploying such high-tech equipments into the low-tech environment of a guerilla-war is somewhat questionable.



A column of BMP-2's pass a Canadian UN observer. Note the cold weather hood on the driver's position.



Same column, the mounting of an extra road wheel on the rear panel is interesting.



Battery of BM-22 Uragan (9P140) multi-barrel rocket launchers on ZIL-135 chassis. This vehicle has 16 X 220mm tubes.

ZIL-135, probably a BM-22 reload vehicle, followed by a BTR-60 Command Vehicle.







Column of T-62 tanks, some with tarped DShK 12.7mm MG's fitted.



Upgraded T-62's fitted with add-on turret armour.



2S1 122mm self-propelled gun followed by 1V12 command vehicles. 1V12 is the designator for a set of 1V13/14/15 and 16 command vehicles.





2S3's followed by their maintenance vehicles.



BM-21 122mm multi-barrel rocket launchers followed by URAL-375 resupply vehicles.



BM-21 on URAL-375.



BTR-80's negotiate the narrow streets of an Afghan town.



Headquarters complex including two MT-LBu command vehicles.



MT-LBu command vehicle with rear extension to provide a covered working area.





BTR-60 command vehicle with antenna erect, behind is a ZIL-131 electronics van.



Convoy protection, a soft-skin mounting a ZU-23/2 anti-aircraft gun. Although not used in its designed role, anti-aircraft guns are very effective in an anti-personnel role. Even if they don't hit their target, they do tend to encourage the object of their attention to keep his head under as much ground as possible.







T-55 with rubber side sheets and added panels on hull sides.





A column of BTR-80's pass the BTR-80 checkpoint.



Mixed column of BMP-1, BMP-2 and BTR-80. Note the anchor symbol on the last BMP-1. This is probably indicative of a Naval Infantry presence.



Column of "Naval Infantry" BMP-1 and BMP-2 moving into laager.





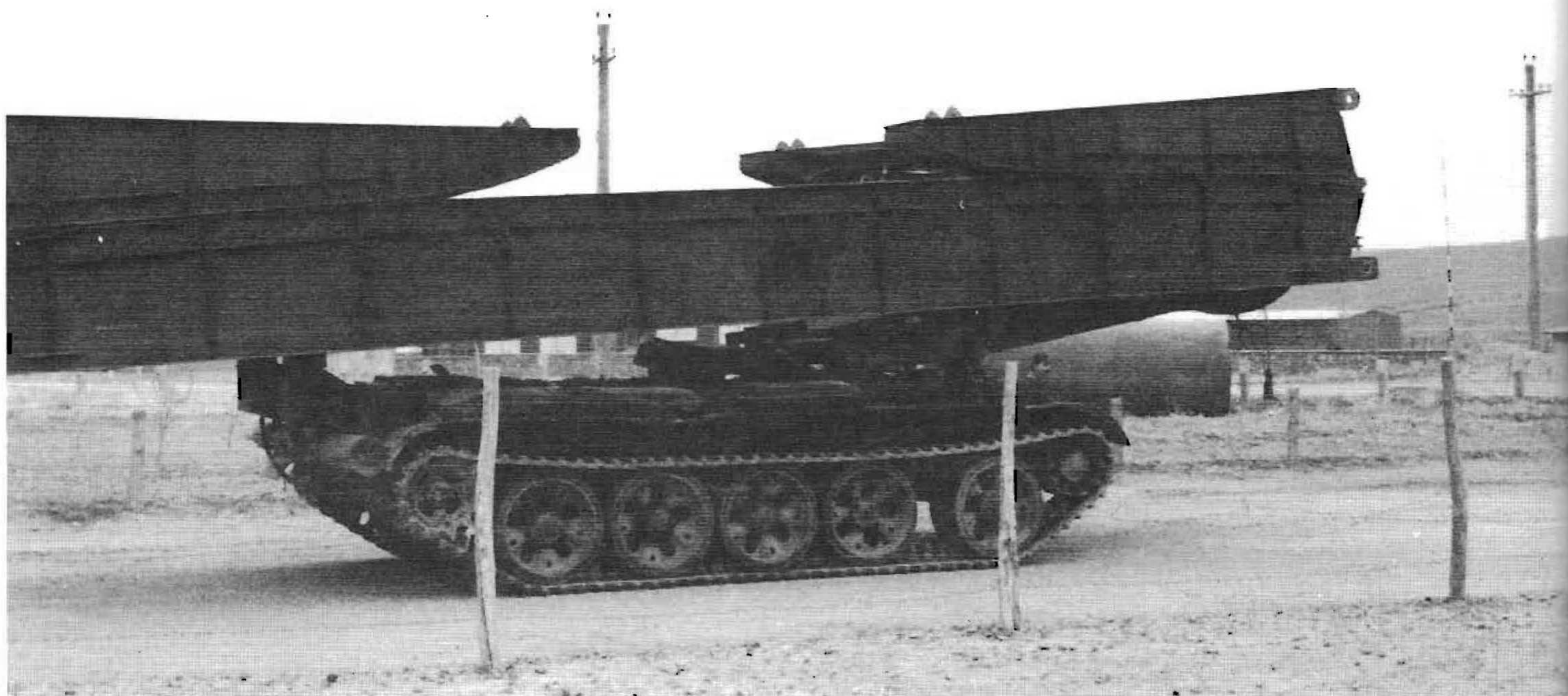
Mixed artillery force of BM-21 MRL's and 2S3 152mm S.P.G.'s



2S3 152mm S.P.G.



BM-21 122mm M.R.L. mounted on the URAL-375 truck. These weapons are usually ripple-fired, after which the battery goes elsewhere in very short order.



MTU-20 armoured bridge layer on the T-54/55 chassis. This vehicle can lay an 18 metre bridge in under 2 minutes.





Heavily loaded T-62 with add-on turret armour, laser rangefinder and thermal wrapping on the barrel.



"The Boys" pose in front of their MT-12 100mm anti-tank guns. The towing vehicle is a URAL-375. Many people are curious as to why the Soviets took such units (anti-tank and anti-aircraft) into Afghanistan. It is always easier to leave a non-usable unit intact (and use its bodies for other, more useful pursuits) than it is to break that unit up.



Column of BRDM-3 AT-5 Spandrel ATGM vehicles.



1V series ACRV leads a column of BRDM-3 AT-5 Spandrel vehicles.

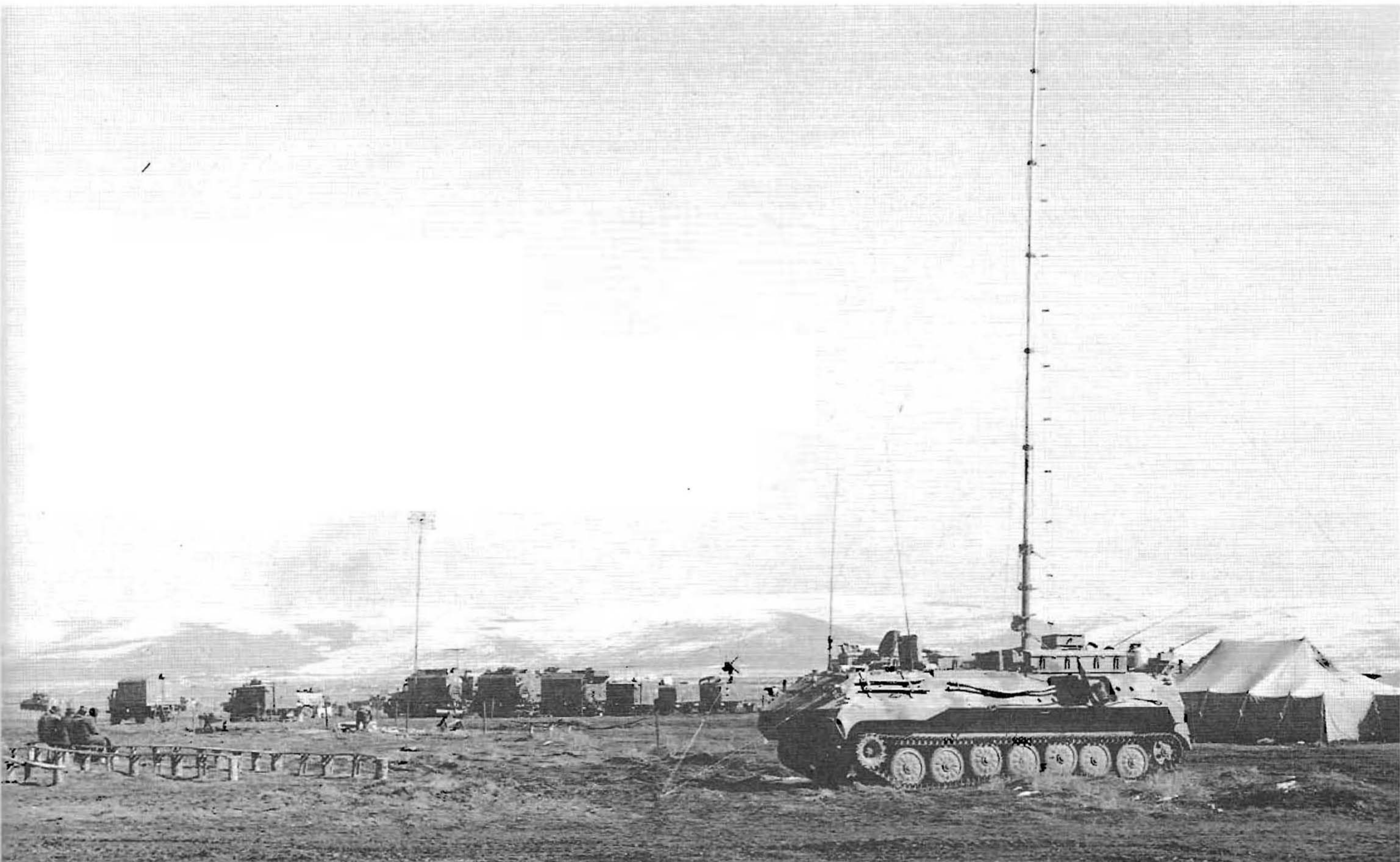


ZIL-131 box-bodied vehicle.



MAZ-537 tank transporter towing a ChMZAP-9990 52,000kg trailer. The load is a T-54T Armoured Recovery Vehicle.





A signals site deploying a number of soft-skinned communications vans and an MT-LBu with both whip and mast antennae in operation.



A very heavily laden BMP-1 passes two BTR-80 having their daily engine checks. To the left is the cab of a MAZ-537.



Mixed soft-skin/armour force lead by a fully-upgraded T-62 with add-on armour, side skirts, side hull panels and a laser rangefinder.



BMP-1 on the road. The heavy load of personal items on Soviet vehicles leaving Afghanistan is typical.





BTR-80 command vehicle. The fluid battlefield and the lack of any enemy EW (electronic warfare) capability resulted in a much higher use of radios than would be found in a European battlefield.



Soft-skin communications site, including SATCOM equipment.



Support vehicles for an artillery unit include a PRP-3 radar vehicle (Small Fred) and two 1V series command vehicles.



2S3 152mm artillery battery lined up ready to move. 1V series command vehicles lead.



Tail end of the same column.



T-55 fitted with side skirts and side hull panels.





2S1 with unit markings, mission stars and hatch-mounted inscription.

BMR mine clearing vehicle pushing a KMT mine roller. Afghanistan was the first time this vehicle was seen in action. Basic chassis is the T-55.



Column of soft-skins, trailers and the occasional BTR-80 added for "stiffening".



Column lead by an MT-LBu.





MT-LBu with upper hull completely enclosed to contain personal kit.



BTR-80 crewman photographs the photographer while a pair of ZSU-23/4 anti-aircraft vehicles passes by. The "Gun Dish" radar can be seen folded down in the centre rear of the turret, the usual travel position.



Column of infantry support vehicles including an MT-LB with a 2B9M Vasilek 82mm automatic mortar secured to the rear deck. Ahead of this arrangement is the far more common GAZ-66 with the mortar in the rear.



Column of BTR-80 and BMP-2.





1V series command vehicle.





URAL-375 cargo/BBV's with/without trailers.



Column of KamAZ-5320 trucks.

Field hospital with BBV ambulance.



E-305V crane mounted on a KrAZ-214 7-ton truck.





BMP-2 in one colour green cam.

BMP-2 in two tone cam with a PK tripod-mounted machine gun on the glacis.



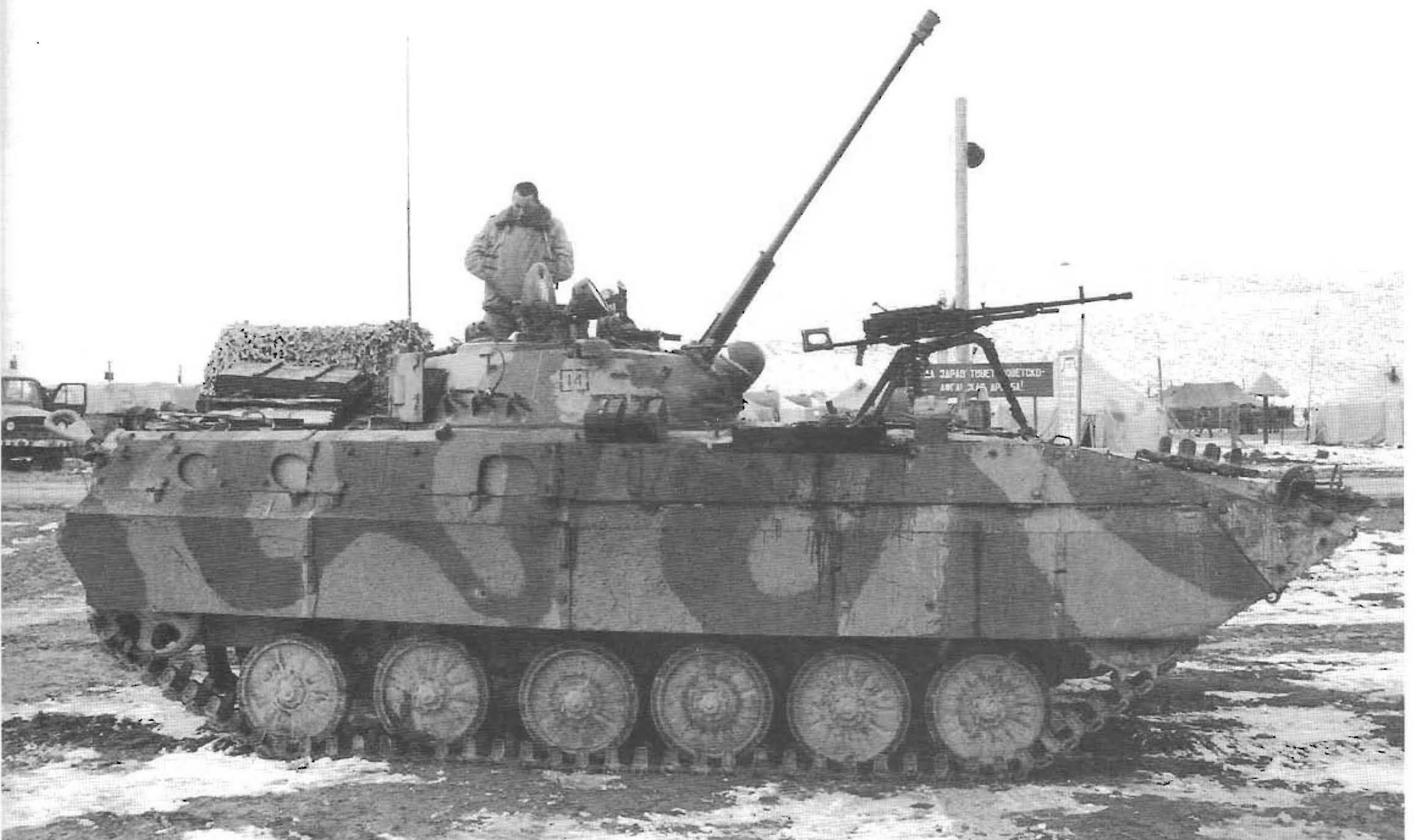
Five BMP-2s in laager.



BMP-2 passes a BBV. Note the AK-74 hung on the commander's hatch.



A "Me and the Boys" shot of a Canadian U.N. observer and a BMP-2 crew.



Good shot of the overall condition of the paint job and weathering details.





Column of KamAZ trucks.



Three BTR-80s to guard a column of SSV's.



URAL-375 fitted with armoured windshield covers. The use of a pod rather than a purpose-built variant is a relatively new practice for the Soviets.



MAZ-537 with flat-bed carrying a forklift leads a column.



Column of BRDM-2 AT-3 Sagger vehicles.



RKHM nuclear, biological and chemical detection vehicle based on the 2S1 chassis.





Column of ZSU-23/4 self-propelled anti-aircraft guns.



BMP-1P in front of a well-worn T-54. In the rear are a BTR-60 and a number of SSV's.





Front view of a BMP-1P. In the "P" variant the AT-3 Sagger launch rail is removed from over the 73mm gun and a mount for the AT-4 Spigot or AT-5 Spandrel is fitted to the roof of the turret.



BMP-1P, note the helmet on the glacis.



Close-up of BM-21 122mm MRL which carries 40 rounds.



A pair of Hips.



Hip being serviced prior to take off.



Hip taking off.



Hip firing chaff right after take off.





HIP helicopter showing external fuel pod, pylon stores mounts and the add-on Infra-Red (IR) suppressor, which was initiated to counter an updated threat from surface-to-air missiles.



Hip (Mi-8) and Hinds (Mi-24) on a runway.



Mi-8 Hip on a pre-fab runway.



Hip under winter condition.



Mi-24 Hind F with mission markings under the pilot's canopy. The Hind F has no nose-mounted 12.7mm machine gun, but replaces it with a pair of side-mounted 23mm cannon.



Hind F nose view, note the IR suppressors.



U.N. observer and Hip crew.



U.N. observer and Hind crew.



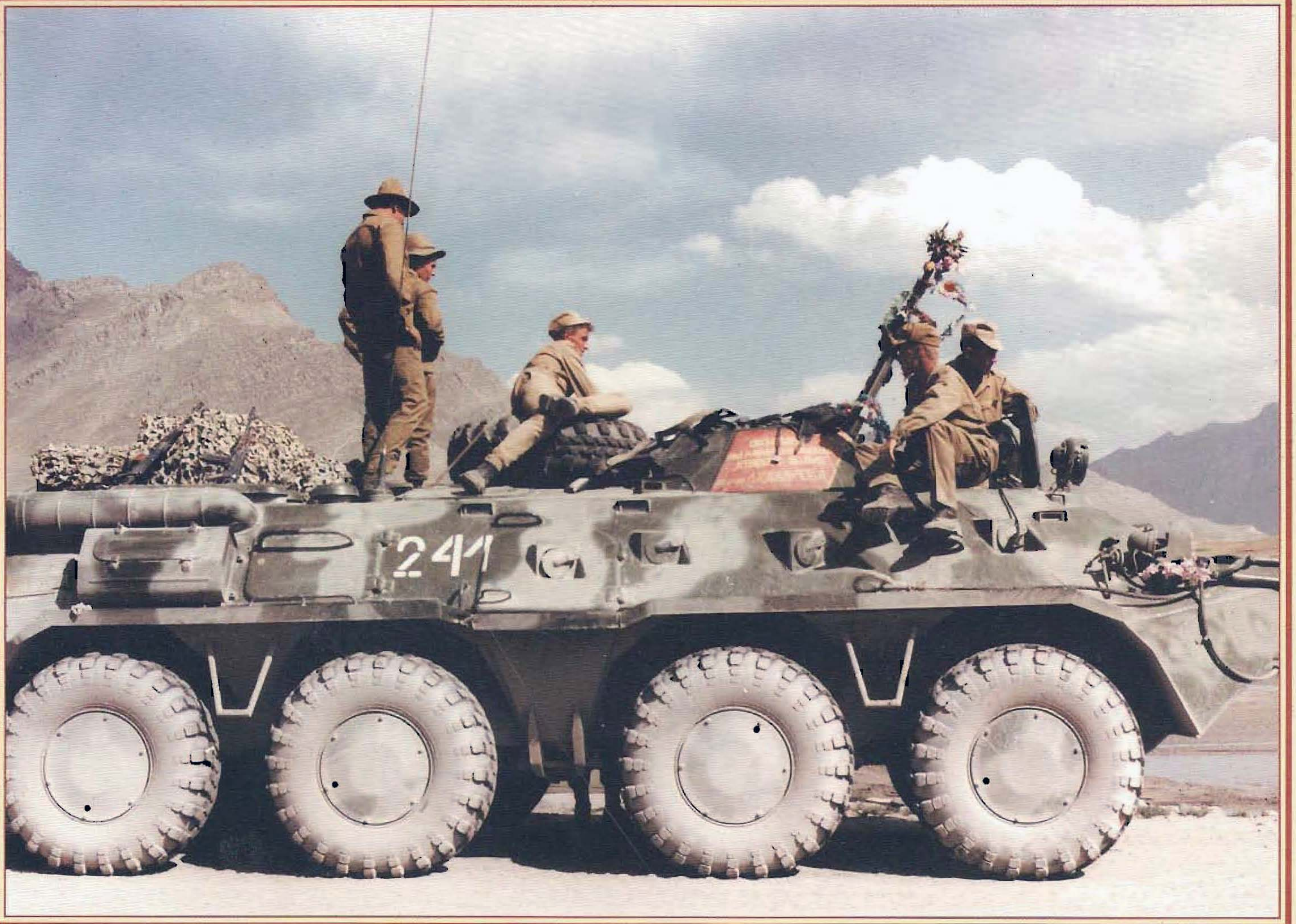
Hind F, note the fuel tank, missile pod and chaff dispensers.



2009

# ARMOR OF THE AFGHANISTAN WAR

by ZALOGA, LUCZAK & BELDAM



**GONGGORD**  
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